



Ninth Coast Guard District
Guardians of the Great Lakes



2003 NINTH DISTRICT SPECIAL NOTICE TO MARINERS



EMERGENCY PROCEDURES

RADIOTELEPHONE (VOICE) DISTRESS MESSAGES

EMERGENCY CALLS: The Distress call "**MAYDAY, MAYDAY**" is used only if a vessel is threatened by **GRAVE** and **IMMINENT** danger; and immediate assistance is needed. The distress call has absolute priority over all other transmissions and need not be addressed to any particular station. Any mariner hearing a distress call shall immediately cease all transmissions that may interfere with the distress call and continue to monitor the frequency that the distress call was heard from. Be prepared to assist if necessary. If no other stations respond to the distress call after a short period of time, call the vessel in distress and gather as much information as possible, then relay it to the Coast Guard.

If you are in distress (i.e., threatened by GRAVE and IMMINENT DANGER), transmit the international distress call on Channel 16 (158.8 MHz) VHF-FM. Enclosures (1) and (2), when used appropriately will greatly enhance your ability to make an effective distress call. In the event you have a medical emergency, provide the information requested in enclosure (3).

(If assistance is needed due to reasons such as engine failure, lack of fuel, etc, a simple call to the Coast Guard or another station is all that is needed. See "non-emergency calls" below.)

EMERGENCY INFORMATION: When in distress, observing another vessel in difficulty or hearing a distress call, supply the following information to the Coast Guard unit that answers your call:

1. Your position, and (if possible) the bearing and distance of the vessel in difficulty.
2. Nature of distress or difficulty.
3. Description of the vessel in distress or difficulty.
4. Your intentions, course, speed, etc.
5. Your radio call sign, name of your vessel, radio listening frequency and schedule.

EMERGENCY POSITION INDICATING RADIOBEACON: Emergency Position-Indicating Radio Beacon (EPIRB) are designed to save your life, if you get into trouble, by alerting rescue authorities and indicating your location. Proper registration of your EPIRB is mandated by Federal Communications Commission regulations and enforced by the U.S. Coast Guard. Additional information on EPIRBs can be found at www.navcen.uscg.mil.

CELLULAR PHONE SERVICE: Some areas upon the Great Lakes have a "***CG**" set-up with Cellular telephone service providers. Individuals should contact their service provider to see if this service is available in their area. The user dials ***CG** on their cellular telephone they are immediately connected to the nearest Coast Guard Unit. The Coast Guard cannot conduct direction finding on the cellular phone frequencies. Thus, the Coast Guard maintains Channel 16 as the primary method to contact the Coast Guard in cases of emergency or other distress. All other traffic should be shifted to another frequency.

While cellular telephones are a popular way of communicating today, they are NO substitute for a vessel's VHF-FM Marine Radio. Cellular phone communication from a vessel is very unreliable and prone to loss of signal. Furthermore, the Coast Guard cannot "home-in" on a cellular phone signal to respond to someone in distress. While cellular telephones may be a convenient way to communicate with fellow boaters or the marina, they should only be used as a last resort for communicating a distress. If you carry a cellular phone on board your vessel, ensure you have extra batteries and that they are fully charged

TOLL FREE CALLS: The Coast Guard has established a toll-free Great Lakes EMERGENCY Search and Rescue (SAR) telephone line for any person on Great Lakes waters to use when reporting a maritime emergency, oil spill, false or "hoax" distress calls, etc. Use this toll free number to report an incident when you do not have radio communications with a Coast Guard unit.

GREAT LAKES EMERGENCY SAR LINE (Emergencies only) is (800) 321-4400.

NON-EMERGENCY CALLS

If you need information or assistance from the Coast Guard (other than in a distress situation), call the Coast Guard on Channel 16 (156.8 MHz) VHF-FM. In this situation you will normally be shifted to a common working frequency allowing the distress and calling frequency to remain open. The shift frequency normally will be from Channel 16 (156.8 MHz) to Channel 22A (157.1 MHz). ***REMINDER:** Channel 16 is a **Distress and Calling Frequency**. All conversations should be shifted to an appropriate working frequency after contact is established.

FALSE DISTRESS CALLS

There has been a significant increase in the number of false or "hoax" distress calls in the Great Lakes region over the last few years. Sending a false distress signal is prohibited and violators will be prosecuted. 14 United States Code 88 (c) states:

"An individual who knowingly and willingly communicates a false distress message to the Coast Guard or causes the Coast Guard to attempt to save lives and property when no help is needed is:

- (1) guilty of a class D felony;
- (2) subject to a civil penalty of \$5,000 and
- (3) Criminal Fee of \$250,000
- (4) six year imprisonment
- (5) liable for all costs the Coast Guard incurs as a result of the individual's action."

The Coast Guard and other agencies treat all distress calls as real until proven otherwise. Hoax calls put rescue personnel at risk; divert rescuers from real distress calls, and wastes public funds. Mariners who have information regarding a suspected "hoax" distress call should contact the Ninth Coast Guard District Command Center

MARINE ASSISTANCE REQUEST BROADCAST

If you are not in Grave or Imminent Danger, then the Coast Guard can assist in a number of ways. The most common form of assistance is the Marine Assistance Request Broadcast. This is essentially a Broadcast the Coast Guard will issue on Channel 16 and Channel 22a inviting any vessels in your immediate area to your assistance. Any vessel desiring to assist is asked to shift their radio to Channel 22a to coordinate with the Coast Guard and your vessel in their approach and assistance. This form of assistance generally produces excellent results. Likewise, any vessel hearing a Marine Assistance Request Broadcast is encouraged to offer their assistance to their fellow boater in need.

SEARCH AND RESCUE OPERATIONS

VESSEL IDENTIFICATION: If your vessel is in distress and abandonment is necessary, **ACTIVATE YOUR EPIRB AND TAKE IT WITH YOU.** If you do not have an EPIRB, set your radio transmitter for continuous emission to provide rescue vessels and aircraft with a homing signal. This will make it easier for search and rescue forces to locate you. Coast Guard search and rescue ships and aircraft use radar to assist in locating disabled vessels. Wooden and fiberglass vessels are often poor radar targets; therefore, operators of disabled craft should hoist a radar-reflecting device as high above the waterline as possible. Any metallic object of irregular shape will make a good reflector. For quick identification at night, shine spotlights straight up. If aircraft are involved turn the light away once you are identified to avoid blinding the aircraft crew. If it becomes necessary to abandon your vessel, attempt to remain in the vicinity of the hull or any large debris that remains afloat.

OPERATING COAST GUARD DROPPABLE PUMPS:

- (1) Pull the handle to release the tension ring on the storage container.
- (2) Lift the lid, open the plastic bag and lift out the pump (do not lift pump with the priming handle; grab the frame).
- (3) Connect the hard, green suction hose to the inlet on the pump and submerge it in the flooded area of your boat.
- (4) Connect the flexible discharge hose and place it over the side of the boat.

- (5) Fill the gas tank.
- (6) Fill the pump housing with water (Do not operate the pump without water in the pump housing).
- (7) Pull out the green choke handle.
- (8) Wrap the pull cord around the starter reel and pull -- repeat as necessary until the pump starts.
- (9) As the engine warms up, push in the choke.
- (10) When the dewatering is complete or to stop the engine, push the stop switch on top of the spark plug.

CAUTION -- Once the pump is started, ensure sufficient ventilation is present.

WARNING -- Do not use the drop pump to dewater a boat with fuel in the bilge.

HELICOPTER EVACUATION PROCEDURES:

- (1) Provide a clear area, preferably on the stern of your vessel.
 - (2) Remove all items that might fly around from the strong downward draft of the rotor wash.
 - (3) Lower all mast, booms, flagstaffs, antennas, etc.
 - (4) Keep all unnecessary personnel out of the way.
 - (5) When the helicopter arrives on scene, change course so as to place the wind thirty degrees off of the port bow of your vessel, and continue at a moderate speed.
 - (6) The helicopter will provide all required equipment. If a stretcher is required, the helicopter will lower one specially rigged for hoisting (only the aircraft litter is authorized for hoist operation).
- IMPORTANT:** To avoid static shock, allow the basket or stretcher to touch your vessel prior to handling it.
- (7) If the stretcher is used, strap the patient in face up. In addition, if his condition permits, the patient should be wearing a life jacket. If a basket is used, place the person in the basket with his hands inside.
 - (8) During helicopter evacuation from a vessel, if you have a radio aboard, the helicopter on the distress frequency may give further instructions.

Do not hook, attach or tie any lines from the helicopter to your vessel. An orange tending (trail) line may be lowered from the helicopter, use it to guide the basket or stretcher to the deck. When the basket or stretcher is ready to hoist, signal the hoist operator by giving the **thumbs up signal**.

SURVIVAL TIPS

HEAVY CLOTHING: It is a common belief that someone dressed in heavy clothing or waders will sink immediately should they fall in the water; this is not true. The air trapped in the clothing provides considerable flotation and bending the knees will trap air in the waders, providing additional flotation. The secret is to keep calm. Do not thrash about or you will lose the air trapped in the clothing. Do not try to remove any clothing or footwear, or you will exhaust yourself as well as lose the air that keeps you afloat. Keep your knees bent, get on your back, and paddle slowly to safety.

HYPOTHERMIA: The loss of body heat occurs quite rapidly when in water. If your boat capsizes, it will probably still float. If fairly new (1978 model or newer), it will probably float even with you in it and full of water or capsized. Get in or on the boat to get as much of your body out of the water as possible. If you cannot get in the boat, a PFD will enable you to keep your head out of the water, which is very important since it is a high heat loss area.

SUDDEN DISAPPEARANCE SYNDROME: Sudden immersion in cold water can be very painful, cause rapid uncontrolled breathing, cardiac arrest (heart stoppage), and other problems. This may cause a person that falls in the water to go under and not resurface. Wearing a PFD is the only defense. If you must enter the water button up your clothing, wear a PFD, and enter the water slowly.

COLD WATER DROWNING: A drowning victim that has been underwater for a considerable time (up to 1 hour) and shows no signs of life, MAY NOT BE DEAD. Start CPR immediately, and get them to a doctor quickly. Numerous documented cases exist where victims have been resuscitated with no apparent harmful effects after long immersions.

ICE: Coast Guard policy is **ICE IS NEVER SAFE**. If you would like additional information on the dangers associated with ice, ask for the pamphlet *Danger! Thin Ice* by writing to Boat and Water Safety, Minnesota Department of Natural Resources, 500 Lafayette Rd, St. Paul, MN 55146.

MARINE COMMUNICATION

RADIO - TELEPHONE COMMUNICATIONS FREQUENCIES

The following VHF-FM frequencies are available at most Coast Guard stations for communication with non-government vessels:

Channel 09 (156.45MHz): The increasing volume of radio calls, primarily between recreational boaters, has exceeded the capacity of Channel 16 which is designed to be only a hailing and distress frequency. In certain areas of high-density vessel traffic, critical distress calls are going unheard on Channel 16. Channel 16 is also the primary frequency for disseminating critical marine safety information and Urgent Marine Information Broadcasts. These transmissions are often "covered" by recreational vessel hailing transmissions. To help alleviate this concern, the Coast Guard and Federal Communications Commission have encouraged the voluntary use of Channel 9 as an alternative hailing frequency for recreational boaters. This policy in no way restricts use or monitoring of Channel 16, but simply offers an alternative, for use in congested areas, in an attempt to unclutter a critical safety frequency. This policy applies to U.S. waters of the Ninth Coast Guard District only. Neither the U.S. nor the Canadian Coast Guards plan to monitor or broadcast on Channel 9, its use is for hailing by recreational vessels only. Safety information and distress broadcasts will continue to be made on Channel 16.

Channel 12 (156.6 MHz): A port operations frequency for use in or near ports, waterways and locks, ship to ship, and ship to shore communications. Use is restricted to the operational handling and movement of vessels, safety of ships, and to the safety of persons in an emergency.

Channel 13 (156.65 MHz): Bridge to bridge communication channel for vessels on the Great Lakes. Channel 13 is intended for navigational safety information between vessels meeting certain criteria. It is not intended for the recreational mariner.

Use of marine radiotelephone Channel 13 on the Great Lakes: The Federal Communications Commission (FCC) has amended Part 80.308 of Title 47 Code of Federal Regulations designating VHF marine Channel 13, instead of VHF marine Channel 16, as the bridge-to-bridge channel on the Great Lakes. These rules were coordinated between the U.S. and Canadian Coast Guards and will relieve the increasing congestion on Channel 16, currently being used for bridge-to-bridge communications.

Channel 16 (156.8 MHz): International "calling and distress" frequency for **DISTRESS, SAFETY** and **CALLING**. The Coast Guard maintains a continuous watch on Channel 16 throughout the Great Lakes. FCC report and order 84-478, which became effective on 25 January 1985, prohibits routine radio checks with the Coast Guard on channel 16 (156.8 MHz). This rule change was requested by the Coast Guard to reduce congestion on the distress channel. Radio checks may be conducted on Channel 16 only by commission representatives, qualified radio technicians installing equipment or correcting deficiencies in the station's radiotelephone, or ship's personnel when requested by the Coast Guard. For further information concerning these regulations, write to Federal Communications Commission, Private Radio Bureau, Aviation and Marine Branch, Washington, D.C. 20554.

Channel 22A (157.1 MHz): Coast Guard working channel for exchange of navigational safety information. Bridge-to-Bridge Radiotelephone Regulations require certain vessels to be capable of transmitting and receiving on channel 22A. As the Coast Guard does not continuously monitor channel 22A, the correct procedure is to contact the Coast Guard on Channel 16 (156.8MHz) and then shift to Channel 22A. Use of channel 22A by non-government users is restricted to communication with the Coast Guard.

Channel 70 (156.525 MHz): Reclassified for exclusive use in a Digital Selective Calling (DSC) System. Normal recreational use is prohibited. At this time, Channel 70 has not been implemented by either the U.S. or Canadian Coast Guard.

CITIZENS BAND (CB) RADIO SERVICE

Coast Guard units, onshore or afloat, **DO NOT** monitor CB frequencies. The Coast Guard's primary calling and distress frequency is Channel 16 (156.8MHz) on VHF-FM marine band.

TIPS FOR RADIOTELEPHONE USE

Golden rule: "Listen and Think Before Transmitting."

1. **LISTEN.** Listen before transmitting to avoid transmitting on a channel that is in use.
2. **THINK.** Think before transmitting to avoid unnecessary breaks in communication while you decide what to say. Radio channels are too busy to waste valuable time; the person kept waiting may have a very important message to transmit.
3. **DISCIPLINE.** Radio regulations forbid unnecessary transmissions. Needless and superfluous transmissions are demand on an already overloaded communication system.
4. **UNNECESSARY TALKING.** Repetition of words and phrases should be avoided unless requested by the receiving station.
5. **POWER REDUCTION.** Always transmit at the lowest power that gives satisfactory communication.
6. **CONTROL.** Follow the instructions of the shore station that may indicate a channel to change to for further communication, or to stop transmitting. The shore station may be receiving a distress or safety message from a vessel out of your range and your transmission may be causing interference. When calling another vessel, name the channel to be used for further communications.
7. **DISTRESS MESSAGES.** If you hear distress traffic in progress, DO NOT TRANSMIT. However, should you be in a position to assist, inform the coastal station in control of your ability to assist at the first opportunity.
8. **CHOOSING A CHANNEL.** When trying to establish contact in poor radio conditions, do not occupy a channel unnecessarily- try another channel.
9. **CHANGING CHANNELS.** Announce your intention to change to another channel. If you are in communication, wait for an acknowledgment before changing.
10. **CALLING.** Although Channel 16 is also a calling frequency, do not call on Channel 16 if you know a working frequency is being guarded. When calling a shore station or another vessel, say the name of the station or vessel called (twice, if considered necessary in heavy radio traffic conditions) followed by the phrase "THIS IS" and your own vessel's name. To help the vessel called, indicate the channel in use. Example: "Port City, Port City, This is Sea star, Sea star on Channel 14."
11. **END OF COMMUNICATION.** The end of communication is indicated by each station adding to the end of its last reply: "OUT."
12. **RADIO CHECKS.** Radio checks with Coast Guard units are prohibited on channel 16 VHF-FM (156.8 MHz). Repeat offenders can expect to receive official notification from the FCC. Exceptions to this rule are as follows:
 - a. Radio check during a FCC inspection.
 - b. Radio checks by technicians when installing or repairing equipment.
 - c. When requested by the Coast Guard.

Boaters should check their equipment by conducting radio checks among themselves on frequency other than Channel 16. Mariners are reminded that FCC regulations require radio checks be made to a specific unit, not just to "any vessel" or "any unit."

The Radio Technical Commission for Marine Services publishes the handbook **"How to Use Your Marine Radiotelephone."** This handbook may be ordered online at www.rtcn.org, by calling 1 (800) 321-4400 or writing Radio Technical Commission for Marine Services, P.O. Box 19087, Washington, D.C. 20036.

AIS SYSTEM

VTS Sault Ste Marie, MI has the Automatic Identification System installed and operational. The AIS is not at this time to be used in lieu of the prescribed rules established in the Code of Federal Regulations. VTS Sault Ste Marie would like for users upon checking into the system to inform the VTS if you have AIS installed and please feel free to use your transit as a test so that we can better implement the system into the VTS Users guidelines and handbook.

What is AIS? Automatic Identification System is a shipboard broadcast system, operating on a VHF maritime band. AIS broadcasts a wealth of information from one vessel to another, and to the VTS where this information is correlated, cleaned-up and re-broadcasted to other traffic within the broadcast area. This information is displayed much like a radar screen overlaid onto a chart, thus providing a complete traffic "picture" to the VTS user.

AIS is intended to enhance the safety at sea; the safety and efficiency of navigation; and the protection of the marine environment. The purpose of AIS is to help identify vessels, assist in target tracking, simply information exchange and provide additional information to assist situational awareness. AIS also provides a feature in which the user can send short messages to the VTS, a specific vessel, or an all call message to all ships with-in the broadcast range. The message content should be relevant to the safety of navigation and should be made as brief as possible. VTS and users may send a reply or acknowledgement message. VTS can use this capability to send any pertinent information to improve the safety with-in the VTS area.

COAST GUARD MARINE INFORMATION BROADCASTS

SCHEDULED BROADCASTS: Important notices to mariners, storm warnings, advisories, and other important marine information. Coast Guard units shown below make scheduled broadcasts every 12 hours on channel 22A (157.1 MHz) VHF-FM commencing at the times indicated below:

Station	Area	Time(UTC)	Subject BCST			
			WX	SW	HD	NTM
<u>Group Buffalo</u> - Lake Erie, Ontario and St. Lawrence River Every 12 hours commencing at		0255	X	X	X	X
<u>Group Sault Ste. Marie</u> - Lake Huron, Michigan, and Superior Every 12 hours commencing at		0005	X	X	X	X
<u>Group Detroit</u> - Lakes St. Clair, Erie, Huron; and Detroit and St. Clair Rivers Every 12 hours commencing at		0135	X	X	X	X
<u>Group Milwaukee</u> - Lake Michigan Every 12 hours commencing at		0255	X	X		X
<u>Group Grand Haven</u> - Lake Michigan Every 12 hours commencing at		0315	X	X		X

WX = WEATHER
SW = STORM WARNINGS

HD = ENVIRONMENTAL CONDITIONS
NTM = NOTICE TO MARINERS

Marine Information Broadcasts from Canadian Coast Guard radio stations are per the schedule broadcasts outlined in the latest edition of Radio Aids to Marine Navigation, Publication TP 146 E.

SAFETY BROADCASTS: Per radiotelephone procedures, the safety signal consists of the word SECURITE (pronounced (SEK-U-REE-TAY), spoken three times and transmitted before the call. The safety signal precedes a safety message and indicates that the station is about to transmit a message containing an important navigational or meteorological warning. Safety messages are only used when the information is so important to the safety of navigation that a delay in its dissemination would create a hazard to shipping. Safety messages normally consist of one subject, (such as important marine information, storm or hurricane warning, or advisory) and are made only when directed by proper authority.

URGENT BROADCASTS: Per radiotelephone procedures, the urgency signal consists of three repetitions of the word PAN (pronounced Pawn), preceding an urgent message and indicates that the calling station has a very urgent message to transmit concerning the safety of a ship, aircraft or other vehicle, or the safety of a person. This includes (but is not limited to) overdue aircraft, man overboard, vessel fire, grounding or sinking, medical cases, and information concerning criminal activities in the maritime environment. The urgency signal is not used to broadcast weather.

MARINE RADIO LICENSING INFORMATION

U.S. Federal Communications Commission (FCC) rules for recreational boaters can be found online at <http://www.fcc.gov/>, or by calling the FCC at 888-225-5322.

NATIONAL WEATHER SERVICE VHF-FM RADIO

The National Weather Service (NWS) has established a network of VHF-FM continuous weather information radio stations. The programming on these stations is oriented on the present and near future, with special emphasis on weather and river warnings. Weather Broadcasts include:

- (a) Description of the weather patterns affecting the Great Lakes region.
- (b) Forecasts for the U. S. portion of nearby land areas through five days.
- (c) Marine forecasts, advisories, and warnings for the appropriate lake.
- (d) Weather observations from selected National Weather Service and Coast Guard stations.
- (e) Radar reports when pertinent.
- (f) Local weather observation and forecasts.
- (g) Special bulletins and summaries concerning severe weather.

Copies of the NATIONAL WEATHER SERVICE chart showing the location of these stations and additional weather related information may be obtained by writing to National Ocean Service, Distribution Branch (N/CG33), Riverdale, MD. 20737-1199, or telephone (301) 436-6990.

Questions concerning weather information dissemination on the Great Lakes and other marine weather questions may be addressed to one of the below listed Port Meteorological Officers:

Amy Seeley, PMO
National Weather Service, NOAA
333 West University Dr.
Romeoville, IL 60441
Tel: 815-834-0600 Ext. 269
Fax: 815-834-0645

George Smith, PMO
National Weather Service, NOAA
Federal Facilities Bldg.
Hopkins Int'l Airport
Cleveland, OH 44135
Tel: 216-265-2370 Ext. 232
Fax: 216-265-2371

GREAT LAKES WEATHER INFORMATION NETWORK

CITY	CALL SIGN	FREQUENCY (MHz)
Akron, OH	KDO-94	162.40 Ch. 2
Alpena, MI	KIG-83	162.55 Ch. 1
Buffalo, NY	KEB-98	162.55 Ch. 1
Chicago, IL	KWO-39	162.55 Ch. 1
Clio, MI	KIH-29	162.40 Ch. 2
Cleveland, OH	KHB-59	162.55 Ch. 1
Detroit, MI	KEC-63	162.55 Ch. 1
Duluth, MN	KIG-64	162.55 Ch. 1
Erie, PA	KEC-58	162.40 Ch. 2
Grand Rapids, MI	KIG-63	162.55 Ch. 1
Green Bay, WI	KIG-65	162.55 Ch. 1
Hesperia, MI	WWF-36	162.475 Ch. 3
Houghton, MI	WXK-73	162.40 Ch. 2
Milwaukee, WI	KEC-60	162.40 Ch. 2
Marquette, MI	KIG-66	162.55 Ch. 1
Rochester, NY	KHA-53	162.40 Ch. 2
Sandusky, OH	KHB-97	162.40 Ch. 2
Sault Ste. Marie, MI	KIG-74	162.55 Ch. 1
Sister Bay, WI	WXN-69	162.425 Ch. 7
South Bend, IN	WXJ-57	162.40 Ch. 2
Syracuse, NY	WXL-31	162.55 Ch. 1
Toledo, OH	WXL 51	162.55 Ch. 1
Traverse City, MI	KIH-22	162.40 Ch. 2
Watertown, NY	WXN-68	162.475 Ch. 3

CANADIAN COAST GUARD SARNIA TRAFFIC CENTER

Sarnia Traffic Center is located at Sarnia, Ontario, and is equipped with VHF-FM radio transmit/receive capabilities, utilizing six transmitter sites. They are authorized to use two sector frequencies: Channel 12 VHF-FM from transmitters at Port Burwell and Leamington, Ontario, and Channel 11 VHF-FM from transmitters located at Sarnia, Kincardine, Silver Water (on Manitoulin Island) and Gros Cap (Sault Ste. Marie) Ontario.

The Center operates 24 hours a day, administering Vessel Traffic Services under both Canadian and United States regulations. The Sarnia Zone encompasses both voluntary and mandatory reporting areas. The mandatory Call-In-Points (CIP) applies to all ships 20 meters or more in length. Ships are required to report at the CIP and provide the center with an estimated time of arrival (ETA) for the next CIP, or advise of its intentions (i.e. proceed to dock). This provides the Center with the information required to respond to ship requests for traffic advisories. A ship may request a traffic advisory when reporting at a CIP, or at any time it requires the information. The voluntary part of the system allows the center to initiate Search and Rescue procedures if a ship is overdue at a CIP, and the center is unable to contact the vessel using a radio search.

Sarnia Traffic also has the responsibility to issue Notices to Shipping for the entire central region of the Canadian Coast Guard. These notices release information pertaining to the establishment, removal, condition or changes to any marine facility, service, or procedure; or to the existence of anything deemed to be a hazard to navigation in Canadian or contiguous waters (similar to USCG Broadcast Notices To Mariners). Notships (Notice to shipping) are issued as soon as the Sarnia Traffic Center receives the information, and remain in effect for varying lengths of time, until the situation no longer exists or until a written Notice to Mariners issued by Ottawa covers it.

Sarnia Traffic Center also makes alerts and disseminates information regarding pollution and shipping casualties involving Canadian and contiguous waters. The Center notifies and passes information to relevant members of the Canadian Coast Guard and the U.S. Coast Guard when the U.S. waters are affected or threatened.

SARNIA TRAFFIC CENTER CALL-IN-POINTS

<u>Detour Reef Light</u>	Up and Downbound	Voluntary
<u>Line joining Great Duck Island and Presque Isle, Michigan</u>	Up and Downbound	Voluntary
<u>Harbor Beach, Michigan and Point Clark, Ontario</u>	Up and Downbound	Voluntary
<u>30 Minutes Above Lake Huron Cut Lighted Buoy 11</u>	Downbound	Mandatory
<u>Lake Huron Cut Light 7</u>	Downbound	Mandatory
<u>Lake Huron Cut Lighted Buoy 1</u>	Upbound	Mandatory
<u>St. Clair / Black River Junction Light</u>	Up and Downbound	Mandatory
<u>Stag Island Upper Light</u>	Upbound	Mandatory
<u>Salt Dock Light (Marine City)</u>	Up and Downbound	Mandatory
<u>Grande Point Light 23</u>	Downbound	Mandatory
<u>St. Clair Flats Canal Light 2</u>	Upbound	Mandatory
<u>Lake St. Clair Light</u>	Up and Downbound	Mandatory
<u>Belle Isle light</u>	Downbound	Mandatory
<u>Grassy Island</u>	Up and Downbound	Mandatory
<u>Detroit River Light</u>	Up and Downbound	Mandatory
<u>Southeast Shoal Light</u>	Up and Downbound	Voluntary
<u>Long Point</u>	Up and Downbound	Voluntary
<u>20 Minutes Before Entering or Leaving</u>	In and Outbound	Mandatory
<u>Immediately Before Entering or Leaving the Rouge River</u>		
<u>Cove Island Light - Georgian Bay</u>	Going into or out of	Voluntary

WATERWAYS MANAGEMENT

COAST GUARD AIDS TO NAVIGATION MISSION

The Ninth Coast Guard District is responsible for approximately 2,679 federal aids and regulates 3,016 private aids to navigation, within the Great Lakes. Of the federal aids, approximately 1,733 are floating aids, which are decommissioned (pulled out) each fall (37% of which are replaced with winter markers). Aids are recommissioned each spring. Seasonal aids to navigation are placed into service or changed at specified times of the year. The Ninth Coast Guard District Aids to Navigation Branch issues Local Notice to Mariners, approves federal and private ATON projects, and reviews navigable waterways to ensure

they conform to the lateral marking system. To service these aids, the Ninth Coast Guard District employs six cutters and 10 Aids to Navigation Teams. Seasonal aids to navigation are placed into service or changed at specified times of the year. The dates outlined in the Light List (col. 8) are approximate and may vary due to adverse weather or other conditions.

CAUTION WHEN USING AIDS TO NAVIGATION

Aids to navigation depicted on charts comprise a system of fixed and floating aids with varying degrees of reliability. With respect to buoys, the buoy symbol is used to indicate the **assigned position** of the buoy body and the sinker, which secures the buoy to the lakebed. The approximate position is used because of practical limitations in positioning and maintaining buoys and their sinkers in precise geographical locations. These limitations include, but are not limited to: inherent imprecision in position fixing methods; prevailing atmospheric and lake conditions; the slope of and the material making up the lake bed; buoys moored to sinkers by varying lengths of chain; and the fact that buoy bodies and sinkers are not under continuous surveillance. Aids to navigation are normally checked only during periodic maintenance visits, which often occur as much as a year apart. The position of the buoy body can be expected to shift inside and outside the charting symbol due to the forces of nature. The mariner is also cautioned that buoys are liable to be carried away, shifted off station, capsized, sunk, etc. Lighted buoys may be extinguished or sound signals may not function due to ice, collisions, or other natural causes.

For the above reasons, **A PRUDENT MARINER MUST NOT RELY SOLELY UPON THE POSITION OR OPERATION OF FLOATING AIDS TO NAVIGATION**, but shall also utilize bearings from fixed objects and aids to navigation on shore. Further, a vessel attempting to pass close aboard buoys always risks a collision with the yawing buoy or the obstruction the buoy marks.

REPORTING AN AIDS TO NAVIGATION DISCREPANCY

To report an inoperative aid to navigation, contact your nearest Coast Guard station. Report the following:

- a. The name or location of the aid, and Light List number if known.
- b. Problem with the aid.
- c. Your name and phone number or vessel name and call sign.
- d. If known, who/what destroyed the aid.

VANDALISM OF AIDS TO NAVIGATION

Vandalism of aids to navigation is a dangerous, costly, and senseless act. Many of the aids that are vandalized require thousands of dollars to replace and further tax the already burdened Coast Guard units to repair the damaged aids. Vandals, who in any way deface an aid, may be endangering the lives and property of the mariners who depend on the aid for safe navigation. Boaters and citizens are urged to report cases of vandalism to the nearest Coast Guard station or the **Ninth Coast Guard District Aids to Navigation Office at (216) 902-6060 (COLLECT)**. Information on names, times, places, and descriptions of boats or vehicles will be helpful in any prosecution. Under 33 CFR 70.05, individuals who vandalize aids to navigation are guilty of a misdemeanor, and may be punished with a fine or imprisonment.

PRIVATE AIDS TO NAVIGATION

Private Aids to Navigation include lighted structures and daybeacons, lighted and unlighted buoys, RACONs and fog signals. Half of the aids to navigation established on the Great Lakes are operated and maintained by private interests. These interests include private citizens, marina and yacht clubs, municipal and state governments, construction and dredging companies, research and non -profit organizations, beachfront associations, and large industrial concerns.

Private aids on navigable waters regulated by the federal government require either a Coast Guard permit or Coast Guard letter of no objection. The application for a permit, form CG-2554, can be obtained by

writing or faxing the Private ATON Manager at the address and phone number given below. Likewise, form CG-2554 is the means of applying for a letter of no objection.

Non-commercial, single-boat, mooring buoys do not require a Coast Guard permit, provided they do not cause more than a minimal adverse effect on navigation and display the standard markings. The same is true of most information and regulatory marks, such as swim buoys, no-wake buoys, and race course buoys. For these the Coast Guard issues a letter of no objection. Owners contemplating establishing such buoys should also contact their State Authority, usually the Department of Natural Resources, to determine what additional state and local requirements may exist.

The Private ATON Manager provides applicants assistance in processing their paperwork. Federal regulations governing aids to navigation, copies of permits previously issued to the applicant, illustrations of standard markings, and lists of commercial ATON manufacturers are available. Questions and requests should be directed to Commander (oan), Ninth Coast Guard District, 1240 East Ninth Street, Cleveland, OH 44199, Attn: Private ATON Manager; (216) 902-6074 {phone}; or (216) 902-6071 {fax}.

Owners are reminded of their responsibility for the proper operation and maintenance of their private aids to navigation. When owners receive discrepancy reports from the Coast Guard, they are obligated to take immediate action to correct the discrepancy. Mariners are reminded that they have a responsibility to report discrepant private aids to the nearest Coast Guard unit. All aids to navigation on the Great Lakes, both private and federally maintained, are user monitored. The failure of a mariner to report a discrepant aid to navigation may result in casualties to others. The Coast Guard issues broadcast notice to mariners for reported discrepancies that remain in effect until the discrepancy is corrected or is published in the Local Notice to Mariners.

BRIDGE DISCREPANCIES/OPERATION DELAYS

Lighting, construction, and operation of movable bridges across navigable waters within the Ninth Coast Guard District are regulated directly by the Ninth Coast Guard District Bridge Branch in Cleveland, Ohio. Discrepancies concerning lighting, construction, fender systems should be reported to the nearest Coast Guard unit via radio, or submitted in writing to Commander (obr), Ninth Coast Guard District, 1240 East Ninth Street, Cleveland, OH 44199. For urgent matters, telephone reports can be made directly to the Bridge Branch at (216) 902-6084 between the hours of 6:30 a.m. and 3:00 p.m., Monday through Friday.

Vessel operators are reminded that many movable bridges in the Great Lakes are operated under regulated dates and times. These regulations are found in Section 117 of Title 33 of the Code of Federal Regulations, which is reproduced in Chapter 2 of Coast Pilot #6, a National Ocean Service publication. Mariners should also be aware that reasonable delays might be encountered when passing railroad bridges over navigable waters in the Great Lakes. Certain stretches of railroad track are controlled by a "blocking system", in which a train cannot be stopped or delayed once it is "in the block". Because of this safety mechanism, some railroad bridges may not be able to open immediately for vessels until the train has crossed the bridge and passed through the block. Even though not all bridges are equipped with a marine radiotelephone, communication with the bridge tender is the best way to determine if a bridge employs this system and how much delay might be expected. Large commercial vessels are always encouraged to provide as much advance notice as possible to any movable bridge operator so passing arrangements can be made.

Mariners should report drawbridge signal discrepancies and/or operational delays by submitting a Drawbridge Signals/Operations Delays form (enclosure 4) to their local Coast Guard Marine Safety Office. Forms are available from the Ninth District Bridge Branch, Marine Safety Offices and most local Coast Guard Stations.

NAVIGATION RULES

The Navigation Rules establish proper navigation lights and actions to be taken by vessels to avoid collision. The operator of each self-propelled vessel of 12 meters (39.4 feet) or more in length are required to carry on board and maintain for ready reference a copy of the Inland Navigation Rules. Operators are liable for a civil penalty of not more than \$5,000 for failure to comply with this requirement.

The International Rules are applicable seaward of the COLREGS demarcation lines, and the Inland Rules apply inside these lines. The Great Lakes are subject to Inland Rules. The demarcation lines are printed

on most navigational charts and are published in the NAVIGATION RULES International-Inland (COMDTINST M16672.2C). The vessel operator is responsible for knowing, understanding and following the applicable navigational rules.

GREAT LAKES MARINE EVENTS

If you plan to sponsor a marine event, Title 33, Code of Federal Regulations, Part 100 requires you to submit a notice to the Coast Guard whenever the nature, circumstances, or location of the event will introduce extra or unusual hazards to the safety of life on the navigable waters of the United States. The rules governing these events are scheduled to change so event sponsors should reread 33 CFR Part 100. Examples of the conditions triggering the need for notice include, but are not limited to: a competition that is inherently hazardous to human life, substantially interferes with the navigation of commercial or pleasure craft customarily in the area, an obstruction of navigable channels, or any expected large accumulation of spectator craft.

If you sponsor an event, which does not present such a hazard, no federal approval is required. However, an interim whose effective date has been delayed indefinitely which requires you to provide notice to the Coast Guard regardless of whether a Coast Guard permit is needed. You should check further with your local and state governments for their requirements. Some states may require that you certify your event is consistent with the state's coastal zone management plan, before the Coast Guard can approve your request. If you are in doubt as to whether Coast Guard approval is required, you may inquire informally or submit notice for review.

Regulations implementing the National Environmental Policy Act (NEPA) may require the Coast Guard to conduct a detailed environmental analysis before it issues a permit for an event to be held in an environmentally sensitive area. These events may now require an environmental assessment (EA) or environmental impact statement (EIS) prior to the issuance of a permit. Thus, the amount of time required to process an application may increase substantially. If your event will take place in such an area please submit notice at least 135 days before the event. Otherwise, please submit the application 60 days in advance. If these time limits are not met, the Coast Guard may have inadequate time to comply with NEPA and issue the permit.

You should understand that the sponsor is responsible for the safe conduct of such an event. This includes instructions to, qualification of, and positive control over participants, as well as protective measures for the spectator fleet and the general boating public. Measures to prevent interference with the normal flow of commercial and recreational traffic may also be required as appropriate unless special local regulations are issued by me for this purpose.

Permanent Special Local Regulations have been established under 33 CFR (Code of Federal Regulations) Part 100.901. These regulations will be effective annually, for the duration of each event, on or about the dates indicated. Annual notice of the exact dates and times of the effective period of the regulations with respect to each event, the geographical description of each regulated area, and details concerning the nature of the event and the number of participants and type(s) of vessels involved will be published in the Local Notice to Mariners. This is not a complete list of events being held on the Great Lakes. The weekly Notice to Mariners will also contain a listing of events for which the Coast Guard has received notice, even if they need neither a permit nor Special Local Regulations.

GREAT LAKES WATER LEVELS

Great Lakes Water Levels are uncharacteristically low for the Great Lakes Region. Mariners are advised to consult the appropriate chart and not rely on recent year or historical water levels when transiting rivers, tributaries, and harbors of the Great Lakes. To access water level information, write NOAA, National Ocean Service, SSMC4 Station 7523, 1305 East-West Hwy, Silver Spring, Maryland 20910-3233, call (301) 713-2902. Water levels can also be access at the following websites: <http://www.nos.noaa.gov>; <http://ny.water.usgs.gov>; <http://oh.water.usgs.gov>; <http://mi.water.usgs.gov>; <http://wi.water.usgs.gov>; <http://mn.water.usgs.gov>.

SUBMERGED OBJECTS IN SHALLOW WATERS - CAUTION

Mariners are cautioned regarding the hazard of snags and other submerged objects, particularly in shallow waters. Even in familiar waters, new obstacles may be encountered, and known obstacles may move. Good seamanship dictates low speed and alertness when transiting areas of shallow water.

MARINE CONSTRUCTION SITES - CAUTION

When the Coast Guard is advised Information about marine construction projects involving dredging, breakwaters, piers, pipelines, oil drill platforms, etc. is disseminated via Local and Broadcast Notice to Mariners. The sites generally display construction lights until these projects are completed. This lighting serves both to light the site for purposes of construction and to warn the mariner of its existence. Barges and equipment operating in the area are usually held in place by mooring systems extending some distance from the equipment. Mariners should not rely on this equipment or its mooring to be well marked, but should pass all construction sites with caution.

SUBMARINE CABLES AND PIPELINES - CAUTION

Submarine cables or pipelines pass beneath various navigable waterways of the Great Lakes. Installation of new submarine cables and pipelines are reported in the Local Notice to Mariners; their locations may or may not be charted. Where feasible, warning signs are often erected to warn the mariner of their existence. In view of the serious consequences resulting from damage to submarine cables and pipelines, vessel operators should take special care when anchoring, fishing or engaging in underwater operations near areas where these cables or pipelines may exist or have been reported to exist. Certain cables carry high voltages; many pipelines carry petroleum products, or natural gas under high pressure. Fire or explosion (with injury or loss of life) or a serious pollution incident could occur if they are damaged. Vessels fouling a submarine cable or pipeline should attempt to clear it without undue strain on the cable, anchors or gear; no attempt should be made to cut a cable or pipeline.

SALMON GILL NETS - CAUTION

Salmon Gill Nets may be set in Northern Lake Huron and Lake Michigan's Grand Traverse Bay from August to October. The nets are marked with a red or orange staff buoy at both ends, as well as orange surface floats **on the water surface** at 300-foot intervals. Please exercise extreme caution while boating in these areas during gill net season. Tampering with these or any other legally set nets is a violation of State and Federal Law. If you need more information contact:

Chippewa-Ottawa Treaty Fisheries
Management Authority
179 W. 3 mile
Sault Ste. Marie, MI 49783
(906) 632-0043

Michigan DNR
P.O. Box 77
Newberry, MI 49868
(906) 293-5131

Mackinac County Sheriff's Department
100 N. Marley Street
St. Ignace, Michigan 49781
(906) 892-6156

U.S. AIR FORCE RESTRICTED AREAS

The U.S. Air Force conducts gunnery and flare exercises throughout the year in Lake Ontario and Lake Superior. Prior to commencement of these exercises, the Air Force notifies the respective U.S. Coast Guard Groups to issue a Broadcast Notice to Mariners (BNM) stating the time, duration, and type of exercise. In addition, a visual and radar search of the area will be conducted. During these exercises, small craft that may not be readily visible are advised to remain clear of these areas during these exercises. Individuals are requested to direct their inquiries concerning the times of the exercises to the U.S. Coast Guard Group, which covers these areas.

LAKE SUPERIOR - RESTRICTED AREA R4305

Defined by the following positions: 47-45-00.0N, 090-05-00.0W direct to 47-45-00.0N 089-28-00.0W direct to 46-55-00.0N, 089-28-00.0W direct to 46-55-00.0N 090-05-00.0W
Contact U.S.C.G. Station Duluth at (218) 720-5412 or 5413.

LAKE ONTARIO - RESTRICTED AREA R5203

Defined by the following positions: 43-24-00.0N, 078-00-00.0W direct to 43-24-00.0N 076-47-00.0W direct to 43-37-30.0N, 076-47-00.0W direct to 43-37-30.0N 078-00-00.0W.
Contact U.S.C.G. Group Buffalo at (716) 846-4154 or 4152.

CAMP PERRY WARNING AREAS SPECIAL FIRING NOTICE - 2001

The Government Designated Impact Area off the shores of Camp Perry and the Erie Industrial Park continues to be used for firing of large caliber artillery, antiaircraft weapons, small arms and other department of defense activities. Restricted entry as provided by Title 33, United States Code, is being enforced. All persons must stay clear of this area during periods of firing activity. Boaters, fishermen, and aircraft pilots should refer to marine navigational chart #14830 and the Detroit air sectional chart respectively for exact boundaries. The Camp Perry strobe light located at 41 32'.15N and 83 01'.00 W will be activated and red range flags displayed during conduct of firing. All persons must stay outside the boundaries of the "range impact area" danger zone. These boundaries affect two impact areas. Lake Erie Impact Area I extends 3.5 miles offshore including the airspace to 5,000' above ground level (agl) and will be in use between 6 a.m. and 6 p.m. daily, including weekends, during the entire calendar year of 2001. Lake Erie Impact Area II extends 10 miles offshore including the airspace to 23,000' agl. Firing in this area is normally conducted between 8 a.m. and 5 p.m., Monday through Friday except federal holidays. Extension to these hours will be published under a separate notice. During the boating season, these areas are normally marked with orange and white buoys bearing the words "range impact area". The 2001 range activity will not require the total use of impact area II. Consequently, a modified impact area II for 2001 will be identified by a series of 14 buoys placed on a west to east line, approximately two and one-half miles south of USCG buoys a, b and c. The buoys will be numbered II-1 through II-14 (from west to east). The area north of this line of buoys will be safe for mariners during periods of firing into impact area II (see chart). Mariners desiring information on navigation or public use of these areas will contact the Camp Perry Range Safety Office on marine VHF Channel 16, or telephone (614) 336-6203 for specific firing schedules.

WATERWAYS ANALYSIS MANAGEMENT SYSTEM (WAMS)

Reviews of WAMS analyses are conducted every five to ten years depending on the criticality of the particular waterway. Advertising for input for the 2001 WAMS reviews has already been completed in several Local Notice to Mariners in the summer and fall of 2000. Input was due to the preparing unit by November 2000. The below list includes WAMS reviews that will be submitted in March 2002. If you have any input for a particular area, submit it by November of 2001 to the responsible unit.

WAMS REVIEWS FOR MARCH 2002:

AREA	LIGHT LIST NO.	RESPONSIBLE UNIT
Sackets Harbor, NY	1760-2020	Group Buffalo
Youngstown Harbor, NY	2400-2650	Group Buffalo
Michigan City, IN	19535-19570	Group Grand Haven
Huron Harbor, OH	4430-4555	Group Detroit
Erie Islands, OH	5520-6025	CGC BRISTOL BAY
St Clair River, N-S-Mid	9305-9565	Group Detroit
Keweenaw Waterway	14725-15250	CGC SUNDEW
Bayfield Harbor, WI	15460-15525	Group Sault Ste Marie, MI
Cheboygan & M.I.R	11780-12170	Group Sault Ste Marie, MI
Manitowoc, WI	20842-20985	Group Milwaukee, WI

Erie Harbor, PA
Port Austin, MI
Marquette, MI

3495-3695
10215-10340
14620-14720

CGC BRAMBLE
CGC BRAMBLE
CGC SUNDEW

SEND INFORMATION TO THE FOLLOWING ADDRESSES FOR INPUT INTO WAMS REVIEW

Commander
USCG Group Detroit
110 Mt. Elliott Ave.
Detroit, MI 48207-4380

Commanding Officer
USCGC BRISTOL BAY
110 Mt. Elliott Ave
Detroit, MI 48207-4380

Commander
USCG Group Grand Haven
650 South Harbor Drive
Grand Haven, MI 49417

Commander
USCG Group Milwaukee
2420 S Lincoln Memorial Dr
Milwaukee, WI 53207-1997

Commanding Officer
USCGC SUNDEW
1201 Minnesota Ave
Duluth, MN 55802-2492

Commanding Officer
USCGC BRAMBLE
PO Box 610786
Foot of Lincoln Ave
Port Huron, MI 48061-0786

Commander
USCG Group Sault Ste Marie
337 Water Street
Sault Ste. Marie, MI 49783

Commander
USCG Group Buffalo
1 Fuhrmann Blvd
Buffalo, NY 14203-3189

PARTNERING TO PRESERVE

LIGHTHOUSES AS NAVIGATIONAL AIDS

The Coast Guard's involvement with Lighthouses, both historic and present day, stems from their roll as maritime navigational aids. The large classical lighthouses that dot the waters of the Great Lakes were built in the days of sail and steam when every mariner, including a large, booming merchant fleet, relied on visual navigation. That is, they would fix their position on nautical charts by determining their relative bearing to known objects. The lighthouses were built to great heights and equipped with powerful lights that could reach far out into the lake. The large uniquely shaped and colored structures could be seen from great distances during daylight hours and the powerful lights were visible for many miles throughout the night. These lighthouses are predominantly found in four different types of locations---atop offshore shoals, reefs or shallows; on islands; at or near harbor entrances; and on prominent points of land along the coastline. All four types were intended to provide the mariner with a reference point to use in determining their position to avoid dangerous shallows and/or provide information in setting a course for safe passage to the vessels next port. To this day, the primary function of lighthouses operated by the Coast Guard is to aid mariners in safely navigating their vessel.

Over the years, the advent of technologies such as radio beacons, radar, long range radio aids to navigation systems (LORAN), and things as simple as more accurate charts or more reliable compasses, rendered many lighthouses obsolete. This trend continues today as systems such as the Global Positioning System and Electronic Charting become more readily available and ever more reliable. With this brief history in mind, we look at the Coast Guard's role with lighthouses today.

NINTH COAST GUARD DISTRICT LIGHTHOUSE PROGRAM

Over the past several years, interest in the historic lighthouses that mark the shoreline and shoal waters of the Great Lakes has grown in leaps and bounds. As the "owner" of the vast majority of the lighthouses in the region, the United States Coast Guard has fielded many questions on its plans and intentions for these historic structures. The following is a brief look at the Coast Guard's Great Lakes lighthouse program. The Coast Guard's Lighthouse Program is four separate but interrelated programs. These four programs focus on:

- 1) **Lighthouse maintenance.**
- 2) **Review & Improvement of the lighthouses as navigational aids**---including solarization, modernization and, most importantly, their continued usefulness to the mariner.
- 3) **Outgranting**---the leasing of the light structures to other persons or organizations.
- 4) **Excessing**---the turning over or sale of the light structure and property to another government entity or private owner.

MAINTENANCE: Limited funding and personnel reductions have strained the Coast Guard's lighthouse maintenance efforts to the breaking point. Automation of the lights and removal of the permanent crews has saved the American taxpayer literally millions of dollars over the past decade. Unfortunately, the loss of the live-aboard crew, and the associated steady upkeep, has not been kind to the general condition of the lighthouses. The Coast Guard's current maintenance efforts focus on keeping the light painted, relatively clean, and weather tight. We also complete the maintenance needed to prevent serious structural damage, as well as maintaining the lamp and optic so that the light remains both reliable and useful to the mariner. We request that the mariner report any malfunction of the light itself and/or damage to the structure to the nearest Coast Guard unit.

REVIEW: In an effort to ensure that we are delivering an efficient, cost effective system of navigational aids to safely mark the waters of the Great Lakes, the Coast Guard conducts periodic reviews of waterway use, mariner needs, and the navigational aid mix. As part of this process, we are constantly looking for ways to modernize and improve the existing aids to make them more dependable and useful to the mariner. Additionally, as with most government agencies these days, we are looking for ways to reduce maintenance and operating costs. With lighthouses, the effort is concentrated on how today's mariner is using the light. Our reviews and modernization efforts often lead to a decision to replace the antique classical glass lens with a modern plastic optic or, in the extreme, to disestablish (turn-off) the light all together. We do not make these decisions in a vacuum! The Coast Guard aids to navigation unit conducting the study of the waterway seeks the input of interested users, ranging from merchant fleets and waterfront facilities to marinas and recreational boaters. Additionally, all proposed changes are normally listed in the *Local Notice to Mariners* to solicit additional comments before implementation. To aid in this process, we ask that if you receive a questionnaire or inquiry from a Coast Guard unit concerning your use of, or interest in, a waterway or particular aid to navigation that you respond factually. Your timely response will ensure that we make an informed decision. We also ask that you pay close attention to the proposed changes in the *Local Notice to Mariners* and respond to the point of contact listed if you have comments. Please don't panic when you see a proposal to discontinue or remove a light or other navigational aid that you believe to be important. We list our proposed changes in the *Local Notice to Mariners* in an effort to garner input from the mariner. In many cases, we will also advertise the proposed changes in local newspapers and on our waterway management website to further increase the maritime public's opportunity to comment. We carefully review the comments received and use the information in reaching our final decision. If you have questions about this process, please write Commander (oan), Ninth Coast Guard District, 1240 East Ninth Street, Cleveland, OH 44199-2060. Attention: Aids to Navigation Branch.

Even if the Coast Guard decides to disestablish a lighthouse as a functioning federal navigation aid, it does not necessarily mean that the light will forever go dark. The Coast Guard is presently working with several historic preservation groups interested in operating lights proposed for disestablishment as privately operated aids. For information on this program please write Commander (oan), Ninth Coast Guard District 1240 East Ninth Street, Cleveland OH 44199-2060. Attention: Aids to Navigation Branch.

The next two programs are helping to cure the maintenance problems outlined above. While the mariner still uses many of the lighthouses in the Great Lakes as navigational aids, the Coast Guard does not necessarily need, nor can we properly maintain, the large historic structures and pieces of property that support the light. In short, we may need the lantern deck to support our lamp and lens, but we no longer need the historic three-bedroom house and several acres of property associated with it. Additionally, many historic preservation and lighthouse interest groups are not satisfied with our maintenance and preservation efforts. To meet both the historic light structure's maintenance requirements and the Coast Guard's need to reduce infrastructure and support costs, we are actively seeking to deliver these one-of-a-kind antiquities into the hands of those better able to preserve them for future generations.

OUTGRANTING. Many of the historic lighthouses in the Great Lakes have been **out granted**, or leased, to other occupants, such as local government entities and historic preservation groups. They now serve as museums or are prominent fixtures in public parks. For information on leasing a particular lighthouse, please write the Environmental and Property Section, Coast Guard Civil Engineering Unit Cleveland, 1240 East Ninth Street, Cleveland, OH 44199.

EXCESSING. The best and lasting answer for historic lighthouse properties is to deliver them permanently to a group or entity able and willing to properly preserve and maintain them. This is being accomplished through a program called "excessing". Essentially, the Coast Guard declares the lighthouse

excess to its needs and turns the property over to the Bureau of Land Management or the General Services Administration for "disposal". The process for the Coast Guard to relinquish ownership of real estate is fairly complicated, but in a nutshell, it works like this. Once declared excess to Coast Guard needs, the property is first offered to other federal agencies. If it clears that process, it is then offered to the State and local governments where it is located. After it clears all of those hurdles, it is offered at public auction or in sealed-bid sale. Please do not run out and start arranging your loan to finance purchase of your favorite lighthouse. Very few lighthouse properties make it to public auction; however, many historic preservation organizations are able to acquire stewardship of lighthouse properties through prearranged agreements with state and/or local government. For additional information on the Coast Guard's outgranting program, please write the Environmental and Property Section, Coast Guard Civil Engineering Unit Cleveland, 1240 East Ninth Street, Cleveland, OH 44199-2060. For information on the historical preservation requirements, please contact your **State Historical Preservation Officer**.

For more information on the Ninth Coast Guard District's Aids to Navigation Program and other topics of interest to the mariner, please visit our web site at <http://www.uscg.mil/d9/www/oan>.

There are many active volunteer organizations throughout the Great Lakes involved in the preservation of Great Lakes lighthouses. For more information, contact the following:

Great Lakes Lighthouse Keepers Assn
Henry Ford Estate
4901 Evergreen Road
Dearborn, MI 48128

United States Lighthouse Society
244 Kearny Street
San Francisco, CA 94108

U.S. DOMESTIC ICEBREAKING POLICY FOR THE GREAT LAKES

The United States Coast Guard normally conducts icebreaking operations for search and rescue and other emergency situations; prevention of flooding caused by ice; and facilitation of navigation. Ninth District icebreaking assistance will be provided in such a way as to minimize the effect on riparian residents, and mitigate, minimize or eliminate detrimental environmental effects. In this regard, mariners should be aware that to mitigate potential affect on the environment, vessel speed limits will be reduced in the St. Mary's River when shore ice is present.

EMERGENCY OPERATIONS: In addition to search and rescue, emergency missions include: opening channels to icebound communities in immediate need of food, heating fuel or medical assistance; restoring access to island communities when their own efforts fail; and assistance to ferry operators. These operations are conducted in direct support of the general public and are not to be construed as assistance to commercial activities.

FLOOD CONTROL: The U.S. Army Corps of Engineers (ACOE) has the responsibility for flood control and determines if icebreaking will assist in the regulation and/or operation of an effected waterway. Upon request of the appropriate ACOE authorities, the Coast Guard may provide ice management facilities and services to aid in the prevention of floods and hazardous water stages caused by ice obstructions. The Coast Guard may also provide ice management facilities and services for flood control in direct response to request from other federal, state or local governmental agencies or private interests. However, since responsibility for flood control is vested in the ACOE, the Coast Guard must consult with the cognizant ACOE officials before undertaking icebreaking for flood control to determine if the operation will interfere with regulation and/or operation of the effected waterway. Icebreaking for flood control shall be conducted to the extent Coast Guard resources are available and can be effectively used.

The National Weather Service is responsible for providing operational river forecast and any flood watches or warnings. River District Offices, located at National Weather Service Forecast Offices in the state where the river is located, prepare routine and special river forecasts and may be contacted for advice regarding flooding.

FACILITATION OF NAVIGATION: Executive Order 7521 directs the Coast Guard to "assist in keeping open to navigation by means of icebreaking operations...channels and harbors in accordance with the reasonable demands of commerce...". Icebreaking in support of commerce has been interpreted to mean primarily the establishment and maintenance of tracks in critical waterways, and secondly, assistance to shipping as necessary to keep shipping moving, prevent hazardous conditions from arising, and to extricate a vessel from danger. Critical waterways are defined as the connecting waterways of the Great

Lakes including, but not limited to the St. Mary's, St. Clair and Detroit Rivers; Lake St. Clair; Pelee Passage and the Straits of Mackinac.

It is recognized that there are at least three distinct navigation periods on the Great Lakes during the ice season.

Extended:	15 December - 15 January
Midwinter:	15 January - 25 March
Spring:	25 March - 15 April

During the extended and spring periods, the Coast Guard's priority is to break ice to establish and maintain tracks on critical waterways. The Coast Guard may establish and maintain tracks on other routes if resources are available, but critical waterways have precedence. This does not include establishment or maintenance of tracks to docks, shipyards or other wholly private areas. The Coast Guard will only break ice in harbors where there is no commercial icebreaking assistance, or the initial spring icebreaking requirements exceed existing commercial icebreaking assistance. In the latter case, the Coast Guard will conduct the initial break out and leave all subsequent icebreaking to commercial assistance. The Coast Guard will not render commercial assistance from port to port when commercial icebreaking services are both readily available and adequate to do the job. The Coast Guard will only provide commercial assistance for purposes of flood relief or to directly assist shipping when necessary for safety or to expedite the flow of commerce. If no commercial assistance is available, then the Coast Guard will assist, as resources are available. The Coast Guard reserves the right to escort vessels into a harbor proper if the assist was begun in an area of ice that exceeded the capabilities of commercial assistance available inside the harbor.

During the midwinter period, tracks will normally not be maintained, except those determined necessary to support priority cargo commerce. Tracks will only be maintained in advance of known vessel traffic. Excessive track maintenance in midwinter is counterproductive since it encourages ice growth. Coast Guard response to requests for direct assistance will be analyzed on a case-by-case basis. The greatly increased navigation difficulty during midwinter is well known. Therefore, it is reasonable to expect shipping to provide vessels capable of handling those conditions. If abnormal conditions exist which produce a request for direct assistance, the Coast Guard will provide such resources as available and deemed appropriate. If no unusual conditions are present, but the vessel is incapable of handling its own transit, it will first be referred to commercial assistance. When commercial sources are unavailable, low powered vessels will be cautioned that it is not safe to sail.

COMMERCIAL ICEBREAKING: The Coast Guard will not normally interfere with private enterprise in conducting icebreaking operations to facilitate navigation. If commercial icebreaking assistance is available, adequate, and willing to assist, Coast Guard icebreaking assistance shall not be provided. If available commercial icebreaking assistance is inadequate, Coast Guard assistance will be provided consistent with other operational priorities. (The availability and adequacy decision is delegated from the Ninth District Commander to Task Group Commanders in Milwaukee, Detroit and Sault Ste. Marie. Safety of the assisted and assisting vessels is a prime consideration in making these decisions.) Typically, the reasonable time for commercial direct assistance is defined as follows willing to respond, and available on scene in less time than the nearest Coast Guard cutter. Adequacy of commercial icebreaking assistance is determined by demonstrated ability to perform. The point is emphasized that Coast Guard interests are in facilitating traffic. The Coast Guard will always reserve the right to respond first or as an additional resource when the situation is viewed by the Coast Guard to be hazardous and warrants quick and/or concerted action.

It is the responsibility of the commercial provider to keep the Coast Guard informed of their location and availability. Mariners are encouraged to engage adequate commercial icebreaking assistance to expedite transit in any areas where delays might reasonably be expected.

ICE-BRIDGES: During winter in the Great Lakes, the frozen waters between the shore and some islands are used as "ice-bridges." Where it can be avoided, the Coast Guard will avoid breaking ice in these areas in order to leave the ice undisturbed. However, the Coast Guard does not endorse or recommend the use of "ice-bridges." Furthermore, the Coast Guard cannot provide the public with reliable information

on ice conditions. Ice is unpredictable and dangerous; even thick ice may detach from shore and move due to reasons not apparent at the location of the "ice-bridge." **NO ICE IS SAFE ICE!**

FREEZING DEGREE DAYS

Freezing Degree Days (F.D.D.) are the accumulated, average, daily temperatures subtracted from 32 degrees F. If the average temperature is above 32 degrees F, the average degree difference is subtracted from the F.D.D. total. For example: an average daily temperature of 31 degrees F on two consecutive days would equal 2 F.D.D.; an average daily temperature of 33 degrees F for the next two consecutive days, or 2 Melting Degree Days, would return F.D.D. to zero.

Generally, ice begins to form at 125 F.D.D.; navigation becomes difficult at 250 F.D.D.; and there is full ice coverage of harbors and rivers at 325 F.D.D.

ST. MARY'S RIVER SPEED LIMITS WHEN SHORE ICE IS PRESENT

Speed reductions will be in effect in the St. Mary's River whenever shore ice is present during the 200-2001 winter navigation season. Under the authority of the Ports and Waterways Safety Act (33 U.S.C. 1221 *et. seq.*) and inland navigation regulations (33 C.F.R. §162.117), the U.S. Coast Guard has established speed limits for commercial vessels navigating the St. Mary's River. Commanding Officer, St. Mary's River Vessel Traffic Service (Captain of the Port, Sault Ste. Marie) has additional authority to reduce those speed limits during the winter navigation season as provided in 33 C.F.R. §162.117(g)(2).

In accordance with an agreement between the Michigan Department of Environmental Quality; Michigan Department of Natural Resources; U.S. Fish and Wildlife Service; U.S. Army Corps of Engineers; and U.S. Coast Guard, the maximum speed limits in the St. Mary's River are reduced when shore ice is present. This action was taken to mitigate any potential impact that commercial shipping and federal activities to facilitate shipping may have on the St. Mary's environment. Absent safety considerations that require a temporary suspension of vessel speed limits (in the opinion of the Captain of the Port Sault Ste Marie), the Coast Guard will monitor and enforce these speed limits.

FOR FURTHER INFORMATION CONTACT: Port Operations Officer, U.S. Coast Guard Marine Safety Office (VTS St. Mary's River), 337 Water Street, Sault Ste Marie, MI 49783-9501. (906) 635-3220.

MAXIMUM SPEED LIMIT BETWEEN	Shore Ice Present	No Shore Ice Present
Munuscong Lake Light Buoy "8" and Everens Point	10 mph	12 mph
Everens Point and Reed Point	7 mph	9 mph
Reed Point and Lake Nicolet Lighted Buoy "62"	8 mph	10 mph
Lake Nicolet Lighted Buoy "62" and Lake Nicolet Light "80"	10 mph	12 mph
Lake Nicolet Light "80" and Winter Point	8 mph	10 mph

**Additional information or changes may be published in the Federal Register or Local Notices to Mariners.*

ST. MARY'S RIVER CALL-IN POINTS:

Down Bound	Up Bound
1. Ile Parisienne	1. Detour Reef
2. Round Island Light 26	2. Munuscong Lake Junction Buoy
3. Point Louise	3. Nine-Mile Point
4. Clear of Locks	4. Six-Mile Point
5. Mission Point	5. Mission Point
6. Six Mile Point	6. Clear of Locks
7. Nine Mile Point	7. Point Louise

8. West Neebish Channel Light 29
9. Munoscong Lake Junction Buoy
10. Detour Reef Light

8. Round Island 26
9. Gros Cap Light

In addition, the following points are added during the winter

Down Bound

11. Gros Cap Light
12. Point Aux Frenes
13. Lime Island Traffic Buoy

Up Bound

10. Lime Island Traffic Buoy
11. Point Aux Frenes
12. Stribling Point
13. Johnston Point
14. Ile Parisienne

NOTE: Commander, Ninth Coast Guard District or Commanding Officer, VTS St. Mary's River may publish additional reporting points. Effective dates and times will be included in Local Notice to Mariners; effective times will be included in Broadcast Notice to Mariners. This information is also available from Soo control or Coast Guard Group Sault Ste. Marie.

NORTH ATLANTIC ICE INFORMATION FOR SEAWAY MARINERS

ANNOUNCEMENT OF 2003 INTERNATIONAL ICE PATROL SERVICES

In February of 2003, the International Ice Patrol (IIP) will commence its annual service of providing maritime safety information on ice conditions in the vicinity of the Grand Banks of Newfoundland. Reports of ice in this area will originate from various sources, including passing ships and IIP reconnaissance flights. Pending ice severity, IIP will broadcast the southeastern, southern, and southwestern limits of all known ice in two message bulletins each day and a daily graphical chart containing ice information, to inform ships of the extent of the estimated limits of all known ice. The Ice Patrol continually monitors ice conditions in the vicinity of the Grand Banks and will commence iceberg warning information when appropriate; however, regardless of ice density, the International Ice Patrol will begin broadcasting at least weekly (Friday) updates beginning on February 14, 2003 at 1200UTC.

The International Ice Patrol strives to locate and track icebergs south of 52°N, especially those south of 48°N, which may pose a hazard to shipping in the vicinity of the Grand Banks of Newfoundland. When position, time, size, and description of iceberg sightings are reported to IIP, the data is entered into a computer program that predicts the icebergs' drift. Please note that the iceberg positions reported in all IIP products are always the predicted position for the date and time of that product. As the time after sighting increases, so does the probability of error in the icebergs' predicted positions. This probability of error is taken into account when the limits of all known ice are determined.

The purpose of Ice Patrol's messages and charts is to advise mariners of our best estimate of the extent of icebergs in the region of the Grand Banks of Newfoundland. The iceberg positions represented within the estimated limits are intended only to provide the mariner an understanding of the relative densities of icebergs. Any attempt to navigate among icebergs within the estimated limits on the basis of the facsimile charts or message bulletins is strongly discouraged.

While the International Ice Patrol strives to be as accurate as possible in reporting the presence of icebergs to mariners, it is not possible to assure that all icebergs are reported. Mariners are strongly urged to use radar carefully, but not to rely entirely upon it to detect icebergs, since icebergs are often not detected by radar alone. There is no substitute for vigilance and prudent seamanship, especially when navigating near sea ice and icebergs.

All ships are encouraged to immediately report sightings of ice to COMINTICEPAT GROTON CT when near or within the "estimated limits of all known ice." Ships are encouraged to make reports even if "no ice" is sighted as knowledge of where ice is not is also very important. When reporting ice, please include the following information:

SHIP NAME AND CALL SIGN

ICEBERG POSITION (Specify either the geographic coordinates (latitude, longitude) or range/bearing from ship's stated geographic position (latitude, longitude))

TIME OF SIGHTING (in UTC)

METHOD OF DETECTION (Visual, Radar, or Both)

SIZE AND SHAPE OF ICEBERG (see Tables 2 and 3)

SEA ICE CONCENTRATION (In Tenths)

SEA ICE THICKNESS IN FEET OR METERS (Specify Units)

In addition to ice reports, sea surface temperature and weather reports are important to the Ice Patrol in predicting the drift and deterioration of ice and in planning aerial patrols. If you make routine weather reports to METEO Washington please continue to do so. If your vessel does not normally make the above reports, then it is requested that you make special reports directly to the Ice Patrol every 6 hours when within the area between latitudes 40°N and 52°N and between longitudes 39°W to 57°W. Ships with one radio operator may prepare the reports every 6 hours and hold them for transmission when the radio operator is on watch. When reporting, please include the following:

SHIP POSITION, COURSE, SPEED, VISIBILITY, AIR AND SEA SURFACE TEMPERATURE, BAROMETRIC PRESSURE, WIND DIRECTION AND SPEED.

Report ice sightings, weather, and sea surface temperature to COMINTICEPAT GROTON CT through INMARSAT, U.S. Coast Guard Communication Stations or Canadian Coast Guard Marine Communications and Traffic Services.

If reporting ice sightings to International Ice Patrol through INMARSAT A or C, use Service Code 42. This will ensure the ice information reaches the COMINTICEPAT GROTON, CT. There is no charge for ice reports made using Service Code 42.

Iceberg sightings may also be reported on guarded frequencies listed in Table 4. (Note that Narrow Band Direct Printing (NBDP (F3C)) radio teletype is available through CAMSLANT Chesapeake (NMN)).

Telephone communications are available to the Ice Patrol Office in Groton, CT throughout the season. The numbers are: 860-441-2626 or 860-441-2773 (Fax) (Ice Patrol Duty Officer, 0700-1630 EST) or 757-398-6231 (Coast Guard Operations Center, Portsmouth, VA, after working hours).

International Ice Patrol earnestly solicits feedback, particularly concerning the value and effectiveness of its services. Questions or comments can be provided by calling 860-441-2626, faxing 860-441-2773, or via e-mail to iipcomms@rdc.uscg.mil.

R. L. DESH
Commander, U. S. Coast Guard
Commander, International Ice Patrol

TABLE 1: IIP BROADCASTS

BROADCAST STATION	BROADCAST TIME (UTC)	FREQUENCIES (kHz)
<u>NAVTEX Broadcast</u>		
USCG Communication Station Boston/NMF	0045, 0445, 0845 1245, 1645, 2045	518 F1B
	Special Broadcast during next available time slot	518 F1B
Canadian CG Marine Communications and Traffic Service St. John's/VON	1820 (Winter), 2220 (Summer)	518 F1B
<u>SITOR Broadcast</u>		
USCG Communication Station Boston/NMF (NIK via NMF)	0030	6314, 8416.5, 12579 F1B
	1218	8416.5, 12579, 16806.5 F1B
<u>RADIOFACSIMILE Broadcast</u>		
USCG Communication Station Boston/NMF (NIK via NMF)	1600, 1810	6340.5, 9110, 12750 F3C
Offenbach (Main), Germany via Hamburg/DDH & Pinneberg/DDK	0930, 2100	3855, 7880, 13882.5 F1C
<u>Radio Telephone</u>		
Canadian CG Marine Communications and Traffic Service St. Anthony/VCM (Iceberg Bulletin for NFLD Coast & Belle Isle)	0107, 0907, 1907	2598 J3E
	Continuous	VHF Channel 21B, 83B
<u>Special Broadcasts</u>		
Canadian CG Marine Communications and Traffic Service St. John's/VON	0007, 0837, 1637, 2207 & as required	2598 J3E
	Continuous	VHF Channel 21B, 28B & 83B
INMARSAT SafetyNET Broadcasts		
AOR-E and AOR-W Satellites	0000, 1200	INMARSAT C SafetyNET
	Special Broadcasts of targets outside limits sent upon receipt	
<u>World Wide Web</u>		
International Ice Patrol Web Page	updated daily after 0000, 1200	http://www.uscg.mil/lantarea/iip/home.html
National Weather Service	updated daily after 1600	http://weather.noaa.gov/pub/fax/PIEA88.gif
<u>Automated Weather Network</u>		
Automated Weather Network (AWN)	updated daily after 0000, 1200	Header: STNT41 KNIK
<u>Facsimile Chart Upon Demand</u>		
Fax On Demand	updated daily after 1600	fax: 1-860-441-2773
E-mail On Demand	updated daily after 1600	ftpmail@weather.noaa.gov

TABLE 2: SIZE DESCRIPTIONS USED BY ICE PATROL

<u>DESCRIPTIVE NAME</u>	<u>HEIGHT</u>		<u>LENGTH</u>	
	<u>(ft)</u>	<u>(m)</u>	<u>(ft)</u>	<u>(m)</u>
Growler	< 17	< 5	< 50	< 15
Small Berg	17-50	5-15	50-200	15-60
Medium Berg	51-150	16-45	201-400	61-122
Large Berg	151-240	46-75	401-670	123-213
Very Large Berg	> 240	> 75	> 670	> 213

TABLE 3: SHAPE DESCRIPTIONS USED BY ICE PATROL

SHAPE	DESCRIPTION
Non-Tabular	This category covers all icebergs that are not tabular-shaped as described below. This includes icebergs that are dome-shaped, sloping, blocky, and pinnacle.
Tabular	Flat topped iceberg with length-height ratio greater than 5:1.

TABLE 4: REPORT RECEIVING STATIONS

RECEIVING STATION	MARINE COMMUNICATIONS & TRAFFIC SERVICE (MCTS) LOCATION	BANDS GUARDED/ XMIT FREQUENCY	
		DAY	NIGHT
VON	Canadian Coast Guard MCTS St. John's, NFLD (St. John's Coast Guard Radio)	VHF 16 2182 H3E	VHF 16 2182 H3E
VCM	Canadian Coast Guard MCTS St. Anthony, NFLD (St. Anthony Coast Guard Radio)	VHF 16 2182 H3E	VHF 16 2182 H3E
VOK	Canadian Coast Guard MCTS Labrador (Labrador Coast Guard Radio)	VHF 16 2182 H3E	VHF 16 2182 H3E
VCP	Canadian Coast Guard MCTS Placentia (Placentia Coast Guard Radio)	VHF 16 2182 H3E	VHF 16 2182 H3E
VOJ	Canadian Coast Guard MCTS Port aux Basques, NFLD (Port aux Basques Coast Guard Radio)	VHF 16 2182 H3E	VHF 16 2182 H3E
VCO	Canadian Coast Guard MCTS Sydney, Nova Scotia (Sydney Coast Guard Radio)	VHF 16 2182, H3E	VHF 16 2182, H3E
VCS	Canadian Coast Guard MCTS Dartmouth, Nova Scotia (Halifax Coast Guard Radio)	VHF 16 2182, H3E	VHF 16 2182, H3E
VAR	Canadian Coast Guard MCTS Saint John, New Brunswick (Fundy Coast Guard Radio)	VHF 16 2182, H3E	VHF 16 2182, H3E

Please note that CAMSLANT Chesapeake (NMN) provides the east coast ON-CALL SITOP service.

DIRECT PRINTING RADIO-TELETYPE SELCALL 1097 (NMN) (Carrier Frequency Shown)		
SHIP TRANSMIT	SHORE TRANSMIT	Availability
4172.3 kHz	4210.3 kHz	(Available upon request)
6264.4 kHz	6314.3 kHz	(2300 UTC - 1100 UTC)
8388.0 kHz	8426.3 kHz	(CONTINUOUS)
12490.0 kHz	12590.8 kHz	(CONTINUOUS)
16696.5 kHz	16817.8 kHz	(CONTINUOUS)
22297.5 kHz	22387.8 kHz	(1100 UTC - 2300 UTC)

SSB VOICE FREQUENCIES (NMN and NMF sites) (Carrier Frequency Shown)		
SHIP TRANSMIT	SHORE TRANSMIT	Availability
4134.0 kHz	4226.0 kHz	(2300 UTC - 1100 UTC)
6200.0 kHz	6501.0 kHz	(CONTINUOUS)
8240.0 kHz	8764.0 kHz	(CONTINUOUS)
12242.0 kHz	13089.0 kHz	(1100 UTC - 2300 UTC)
16432.0 kHz	17314.0 kHz	(Available upon request)

NOTES:

Mariners should note that NAVTEX ICE REPORTS (Category 3) may be programmed for rejection at the receiver. Mariners desiring to receive IIP NAVTEX ICE REPORTS must ensure that their receivers are appropriately programmed for reception.

The Ice Chart Facsimile and the 00 UTC and 12 UTC bulletins are available on the World Wide Web at the International Ice Patrol's products section. IIP's home page can be found at: <http://www.uscg.mil/lantarea/iip/home.html>

The Ice Chart Facsimile is also available via Fax on Demand from the International Ice Patrol's telefax machine. Please dial 1-860-441-2773 from a fax phone, and press "Copy" after successful connection.

The Ice Chart Facsimile is also available via E-mail on Demand from the National Weather Service's FTP e-mail system. Please send an e-mail to ftpmail@weather.noaa.gov with any subject line. The body of the text should read as follows:

```
open
cd fax
get PIEA88.gif      ---or---   get PIEA88.TIF
quit
```

The e-mail server will then automatically send a GIF or TIF formatted image of the facsimile back to the sender's e-mail address.

The Ice Bulletin is now being posted to the Automated Weather Network, a weather service bulletin board accessible by U.S. Department of Defense and NATO units. Use header STNT41 KNIK to access Ice Patrol's products.

INMARSAT SafetyNET BROADCASTS:

The 00 UTC and 12 UTC Ice Bulletins will be broadcast over the AOR-E and AOR-W Satellites. The 00 UTC bulletin is broadcast between 2000 and 2359 UTC, and the 12 UTC bulletin is broadcast at 1130 UTC. In addition, safety broadcasts regarding icebergs outside of the Limits of All Known Ice will be sent over both satellites upon receipt.

Instructions for sending INMARSAT Code 42 Warnings:

INMARSAT-A

1. Select COMSAT (global identification code 01).
2. Select routine priority.
3. Select duplex telex channel.
4. Initiate the call.
5. Upon receipt of GA (Go Ahead), select the desired two-digit prefix access code followed by at + sign (42+).
6. Send your report.
7. The message will be forwarded, at no charge, from the mariner to International Ice Patrol by COMSAT, Corp.

INMARSAT-C (General instructions)

1. Access the 2-digit code service on SES as instructed in your manufacturer's information.
2. Using the SES text editor, prepare the message.
3. Enter the 2-digit code of the service required (42).
4. Select the CES (01, COMSAT, AORW)
5. Transmit your message.
6. Wait for acknowledgment from the CES.
7. The message will be forwarded, at no charge, from the mariner to International Ice Patrol by COMSAT, Corp.

GOOD INFORMATION

During the winter navigation season, once significant ice has formed, the Captain of the Port Sault Ste. Marie closes five areas to navigation to aid in the formation of ice bridges: Grays Reef Passage, South Channel, Waters between Mackinac Island and St. Ignace, Pipe Island North and East Channels, and West Neebish Channel. Under normal seasonal conditions, only one closing each winter and one opening each spring are anticipated. Prior to closing or opening these channels, interested parties including both shipping entities and island residents, will be given at least 72 hours notice by the Coast Guard.

As the weather warms up, the ice begins to deteriorate. This presents potentially dangerous situations in Whitefish Bay and the Straits of Mackinac. When the wind picks up, large plates of ice (sometimes miles across) can break off and start moving. The Captain of the Port Sault Ste Marie using careful judgment and recommendations decides when to have an ice bridge open. The decision is not made to inconvenience anyone, it's made to prevent loss of life.

It is each individual's decision whether to transit across an ice bridge. Use extreme caution. The Coast Guard makes the following recommendations:

1. Leave a float plan with a friend or relative on shore. Tell them where you are going, the route you intend to use, when you plan on departing, when you expect to get back, what emergency gear you have with you, and **your cell phone number**.
2. Know what the anticipated weather will be. Reconsider transiting if visibility is limited. Don't say "I know it's in that general direction. Many snowmobilers and ice fisherman have missed their destination because of visibility, some lost their lives.
3. Bring safety gear, this includes but not limited to: warm clothing (dressed in layers), a flashlight to signal with, several red flares (both handheld and meteor type), a cell or digital phone, a vhf-fm radio, screwdrivers attached to your sleeves (incase you fall through the ice).
4. If you get lost, **stop**. Call the Coast Guard at ***CG** and/or the person you left your float plan with **on your cell phone or on Ch. 16 vhf-fm radio**.

GREAT LAKES RADAR BEACONS (RACONS)

Radar Beacons (RACONS), when activated by an incoming radar signal transmit a reply providing a range and bearing to the beacon on a radar display. The "reply" consisting of a series of dots and dashes on the radar, may be coded for identification purposes. The range is the measurement to the first dot or dash nearest to the center of the radar. Note that the coded response of RACONS installed in the United States may not be received if the radar set is adjusted to remove interference for sea return. Mariners are advised to turn off the interference controls of their radar when reception of a RACON signal is desired. The following is a list of all U. S. RACONS currently established on the Great Lakes:

LLNR	AID NAME	CHARACTER	BAND
6050	Maumee Bay Ent Light 2	M (- -)	X(3cm)
6885	Detroit River Light	X (- . . -)	X(3cm)
6895	Detroit River Ent LT 01 E	O (- - -)	X(3cm)
8400	Peché Island Range Front Light	G (- - .)	X(3cm)
8525	Lake St Clair Light	N (- .)	X(3cm)
10065	Lake Huron Cut Light 7	T (-)	X(3cm)
11505	Nordmeer Wreck Lighted Buoy WR1	N (- .)	X(3cm)
11750	Poe Reef Light	Z (- - . .)	X(3cm)
12580	Round Island Passage Light	X (- . . -)	X(3cm)
12770	Detour Reef Light	D (- . .)	X(3cm)& S(10cm)
14425	Round Island Light 26	M (- -)	X(3cm)
14530	Whitefish Point Light	O (- - -)	X(3cm)
15170	Manitou Light	M (- -)	X(3cm)
16835	Passage Island Light	G (- - .)	X(3cm)
17750	White Shoal Light	K (- . -)	X(3cm)
17775	Grays Reef Light	G (- - .)	X(3cm)
18340	North Manitou Shoal Light	N (- .)	X(3cm)
19790*	Calumet NE Shoal Light Bell Buoy 2	C (- . . -)	X(3cm)
21535	Lansing Shoals Light	Y (- . - -)	X(3cm)

**These RACONS operate year round with the exception of Calumet NE Shoal Lighted Bell Buoy 2, which is discontinued during winter months.*

COAST GUARD NAVIGATION CENTER

The U.S. Coast Guard established the Navigation Center (NAVCEN) to meet the needs of the civil users. NAVCEN is a Coast Guard facility manned 24 hours a day, 7 days a week. The Coast Guard's Navigation Information Service (NIS), operated by NAVCEN, provides information for all radionavigation systems. The NIS is staffed 24 hours a day, 7 days a week and can be contacted at (703) 313-5900 or e-mail at NISWS@navcen.uscg.mil. For more information, contact Commanding Officer, U.S. Coast Guard NAVCEN, 7323 Telegraph Road, Alexandria, VA 22315-3998. The following NAVCEN services are available:

- (a) NAVCEN Web Site (<http://www.navcen.uscg.gov/>) which provides:
 - (1) GPS Status Messages, Almanacs, Precise Ephemeris Data, and Notice Advisory to NAVSTAR Users (NANU's), and Testing Advisories. GPS Status Messages and NANU's are also available via e-mail subscription through the NAVCEN website.
 - (2) DGPS information containing a complete list of all sites and project information.
 - (3) Loran-C notification messages.
 - (4) Local Notice to Mariners for all regions. In addition, the website has general information concerning related topics: text of the Federal Radionavigation Plan, Coast Guards Radionavigation Bulletin, Local Notice to Mariners, Marine Communications notices, and recreational boating safety information.
- (b) 24-hour status recording providing information in voice format. The amount of information is limited to the maximum tape length of 92 seconds. The information is prioritized as follows: cautionary statement, current system status, forecast outages, historical outages, and other changes in the GPS. To contact the status recording, call (703) 313-5907

In addition, the Department of Commerce transmits recorded time information on WWV/WWVH 5, 10, 15, and 20 MHz. During the 40 second interval between time ticks, atmospheric and navigation information is announced by voice. Listen at minute 14 and 15 on WWV and minute 43 and 44 on WWVH for GPS information. Time for broadcast is strictly limited, and the GPS information is prioritized as follows: cautionary statement, NIS operating hours and phone numbers, current system status, and forecast outages.

LORAN "C" INFORMATION

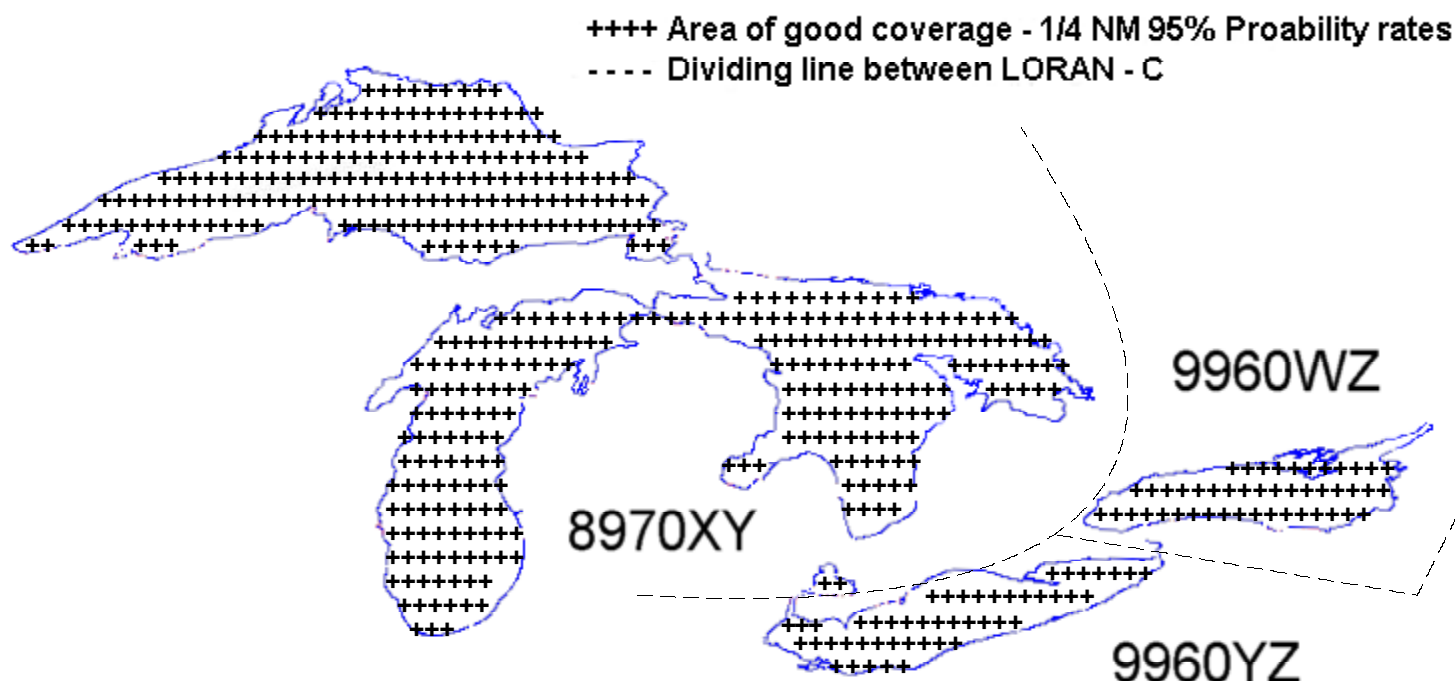
Long Range Navigation, LORAN, is an electronic system using shore based radio transmitters and mobile receivers that allow mariners, aviators and other users to determine their position quickly and accurately, day or night, in practically weather condition.

The Radionavigation Bulletin, distributed quarterly by the U. S. Coast Guard, presents current information on various radionavigation systems and related items of interests. To be placed on the mailing list for this publication write to Commandant (G-OPN-3), U. S. Coast Guard Headquarters, Washington, DC 20593, or call (202) 267-0294. Questions regarding the LORAN-C system should be directed to the following phone numbers:

RATE	CHAIN	FOR SERVICE	FOR COORDINATOR
8970	Great Lakes	(703) 313-5887	(703) 313-5963 (NAVCEN)
9960	Northeast U.S.	(703) 313-5887	(607) 313-5963 (NAVCEN)
5930	Canadian East Coast	(709) 454-3261	(709) 454-2392 (St. Anthony Newfoundland)
7270	Newfoundland East Coast	(709) 454-3261	(709) 454-2392 (St. Anthony Newfoundland)
7980	Southeast U.S	(703) 313-5873	(703) 313-5963 (NAVCEN)

LORAN "C" USER HANDBOOK: The updated and expanded LORAN-C handbook explains in detail the installation and use of technological advances such as solid-state transmitters and state-of-the-art receivers. It provides guidance on such topics as position determination and accuracy, practical aspects of marine navigation, and use of LORAN-C charts. The handbook, 1992 revision of the U.S. Coast Guard's 1980 "Green Book" (stock number 050-012-00331-9), can be ordered online at <http://www.gpo.gov>, or by calling the following Government Printing Offices Bookstores: Cleveland (216) 522-4922; Detroit (313) 226-7816; or Chicago (312) 353-5133

LORAN-C GREAT LAKES SUGGESTED CHAIN USAGE



DIFFERENTIAL GLOBAL POSITIONING SYSTEM

Differential GPS (DGPS) is the regular Global Positioning System (GPS) with an additional correction (differential) signal added. This correction signal improves the accuracy of the GPS and can be broadcast over any authorized communication channel. All DGPS systems consist of the following three basic components: (1) land-based receiver that monitors and collects GPS satellite data and compares this data with information already known by the receiver; (2) a means to transmit corrections generated either at the monitor/reference site or at a central control station in a network of monitor/reference sites; and (3) user equipment that has the hardware necessary to receive the DGPS correction messages and the software necessary to apply the corrections to the information received from GPS satellites.

As a rule, the accuracy that can be obtained from DGPS is proportional to the distance from the user to the monitor/reference site. The Coast Guard will also implement an integrity monitoring system, which will verify the accuracy of the corrections that it transmits on the selected radiobeacon. The frequency that is being used for DGPS by the Coast Guard is MF of approximately 300kHz. The Coast Guard's DGPS Service has been implemented for harbor and harbor approach areas of the continental U.S., Great Lakes, Puerto Rico, and most of Hawaii and Alaska since September 1996, with most sites on line now. The DGPS sites on the Great Lakes are fully operational. Canadian sites are compatible and will overlap certain U.S. areas of coverage, when they are brought on-line. The source for more detailed information and the status of DGPS sites is the Coast Guard Navigation Information Center (NIS) in Alexandria, Virginia.

DIFFERENTIAL DGPS AND SELECTIVE AVAILABILITY: On May 1, 2000, the United States Government stopped the intentional degradation of the global positioning system (GPS) signals available to the public. This feature was called Selective Availability (SA). Civilian users of GPS are now able to pinpoint locations up to ten times more accurately than they did with the Selective Availability turned on.

FREQUENTLY ASKED QUESTIONS ABOUT SA TERMINATION

Will SA ever be turned back on?

The United States has no intent to ever use SA again. To ensure that potential adversaries do not use GPS, the military is dedicated to the development and deployment of regional denial capabilities in lieu of global degradation.

Do I need to replace my receiver to get the higher accuracy?

No. Existing GPS receivers around the world should be getting the higher accuracy right now without any modifications.

With SA gone, do I still need differential GPS (DGPS)?

It depends on your specific user requirements. If you are using GPS for safety-critical navigation, you will still need to use the Coast Guard DGPS or Nationwide DGPS to get the higher accuracy (1-3 meter) and the integrity monitoring/warning service. If you are a surveyor requiring sub-meter positioning, you will still need some form of DGPS to achieve some form of DGPS to achieve that level of precision.

Will the Coast Guard continue to operate its DGPS services?

Yes. The U.S. Coast Guard will continue to run the maritime DGPS network to provide the higher accuracy and integrity monitoring/warning service required for safety-critical navigation. In fact, efforts are currently under way to expand the Coast Guard DGPS network across the continental United States to provide the same GPS augmentation service to terrestrial users on railroads and highways. The expanded network is known as the Nationwide DGPS, or NDGPS, service.

Is DGPS more accurate now?

No. There should not be much change in the accuracy of DGPS. However, DGPS corrections may not need to be broadcast as frequently any more. As a result, we may see future commercial DGPS services that use less radio bandwidth and thus cost less to the end user.

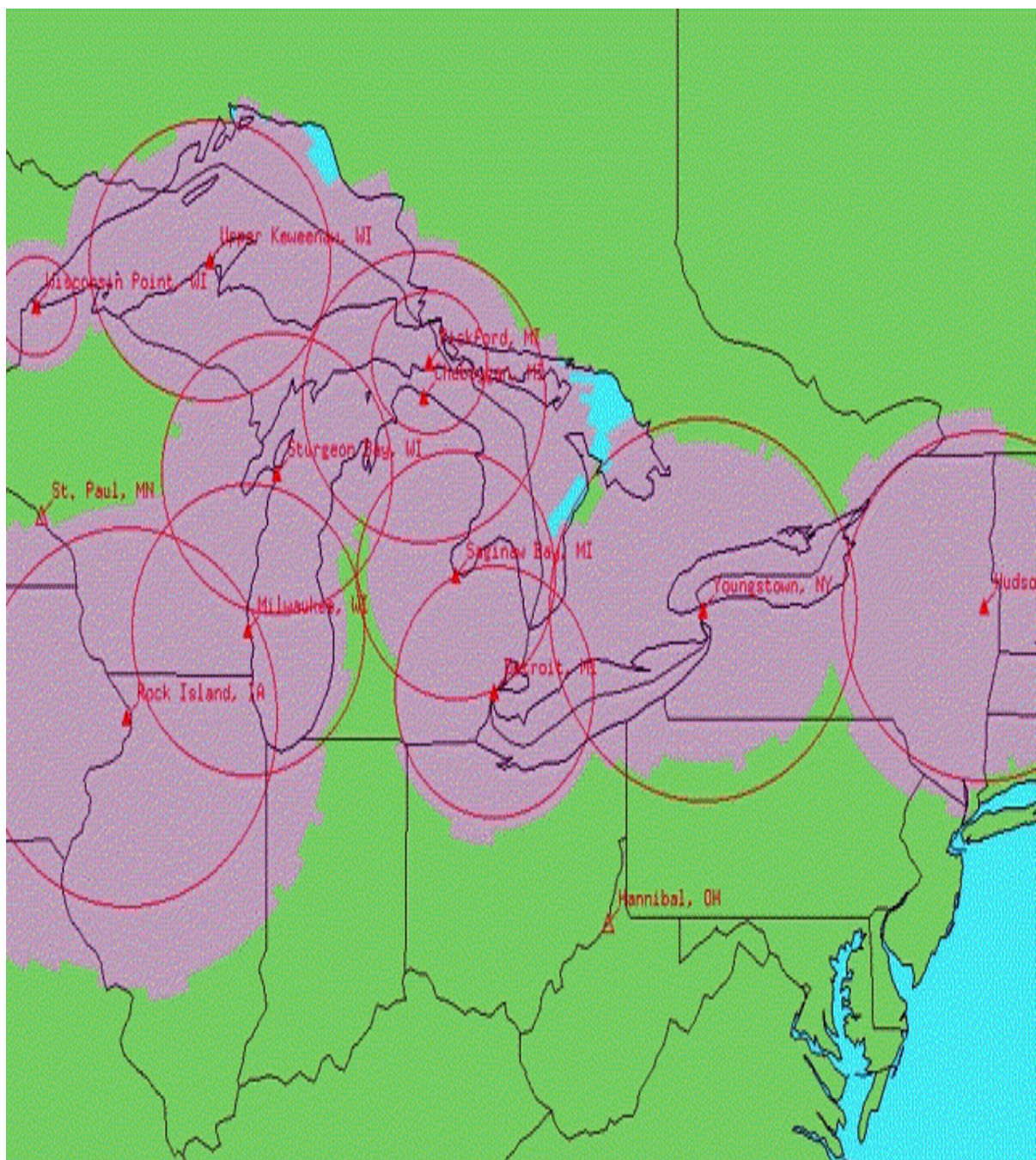
Was SA turned off in other parts of the world?

Selective Availability was a global degradation of the GPS service. It could not be applied on a regional basis. By turning it off, the President immediately improved GPS accuracy for the entire world. The United States has no intention of reactivating SA ever again. Users in the U.S. and the rest of the world should now be experiencing the same basic GPS accuracy of 10-20 meters or better.

DIFFERENTIAL GPS SITES - GREAT LAKES

DGPS Sites	Frequency kHz	Range StM	Baud Rate	Position
Youngstown, NY	322kHz	150	100bps	43°13'54.0"N 78°58'12.0"W
Detroit, MI	319kHz	100	200bps	42°17'50.4"N 83°05'43.2"W
Saginaw Bay, MI	301kHz	85	100bps	43°37'43.2"N 83°50'16.2"W
Cheboygan, MI	292kHz	110	200bps	45°39'12.6"N 84°27'56.4"W
Pickford, MI	309kHz	60	200bps	46°03'53.0"N 84°21'41.0"W
Upper Keweenaw, MI	298kHz	130	100bps	47°13'42.0"N 88°37'30.0"W
Wisconsin Point, WI	296kHz	40	100bps	46°42'18.0"N 92°00'54.0"W
Milwaukee, WI	297kHz	140	100bps	43°00'09.1"N 87°53'18.4"W
Sturgeon Bay, WI	322kHz	110	100bps	44°47'43.7"N 87°18'51.6"W
Hudson Falls, NY	324khz	135	200bps	43°16'12.6"N 73°32'18.6"W

GREAT LAKES DGPS COVERAGE



NAUTICAL CHARTS, PUBLICATIONS AND INFORMATION

LOCAL NOTICE TO MARINERS

The Local Notice to Mariners is mailed to addressees who have a use for or legitimate interest in the information contained therein. These include, but are not limited to, maritime organizations, merchant vessels, small boat operators, Coast Guard Auxiliary Flotillas, Power Squadrons, yacht clubs, and news media. The LNM is prepared for printing at the beginning of each week. Therefore, information intended for the LNM concerning operations that may affect the safety of navigation must arrive by 8:00 a.m. on Monday, two weeks before the proposed operation, at the Ninth Coast Guard District, Aids to Navigation Office, marked "LNM entry." When submitting an entry for the LNM, include the following information: (1) name of the company doing the work; (2) location of the work (both the latitude and longitude and the geographic location); (3) dates pertaining to the event; (4) description of the work/event; and (5) phone number of person to contact in case we have further questions. The information contained in each LNM is current as of 10:00 a.m. on the printing date. Mariners should keep in mind printing and mailing delays.

The Ninth District Local Notice to Mariners (LNM) is the primary source of information for mariners with the Broadcast Notice to Mariners providing supplementary, last minute information. Although individual articles refer to specific charts and/or publications, it is the responsibility of users to decide which of their charts and/or publications require corrections. To standardize the system throughout the U.S. Coast Guard, the following LNM format has been adopted:

SECTION I. SPECIAL NOTICES - Information that affects a wide segment of the maritime public or is otherwise especially noteworthy with regard to particular events and general developments in navigation.

SECTION II. DISCREPANCIES AND CORRECTIONS - Aids to navigation, which are not operating as shown in the Light List. Discrepancies which are expected to be corrected before press time (10:00 a.m. Tuesdays) are not included. Discrepancies that have been corrected since their publication in the last Local Notice to Mariners will be listed.

SECTION III. TEMPORARY CHANGES AND CORRECTIONS - Aids to navigation that have a change of a temporary nature. In addition, temporary changes that have been corrected since their publication in the last Local Notice to Mariners will be listed.

SECTION IV. CHART CORRECTIONS - Information concerning actual work done, both temporary and permanent, on aids to navigation federally and privately maintained that should be reflected on charts. The Local Notice to Mariners contains corrective action that affects charts, Coast Guard Light List, Coast Pilots, and such other publications that may from time to time require updating. Corrective action affecting charts is contained in section V where chart corrections and new editions of charts are listed numerically by chart number, beginning with the lowest and progressing through all charts affected. Related charts, if any, have their own correction, which in turn pertain to a single chart only. The following example explains the individual elements of a typical correction.

Chart number	Chart edition	Edition date	Last Local Notice to Mariners	Datum	Source of Correction/ Current Notice to Mariners
14001	1st ed	12/20/53	(Last LNM 2/83)	(NAD) 1927	(CG9) or (NOS CL 80/87) 15/83
(Temp)	LAKE WOEBEGON	---- Name of Chart			
Add	Imaginary Point Light	48 24 57.2N 94 03 30.2W			
	FI 2.5 sec 25ft 4 St M				
		position			
Corrective action	Object of corrective action				

A chart number proceeded by the word (Temp) below the chart number indicates that the chart correction action is temporary in nature. The letter (M) immediately following the chart number indicates that the correction should be applied to the metric side of the chart ONLY. The letter M is not part of the chart number. Courses and bearings are given in degrees clockwise from 000 true. Bearings of light sectors are toward the light from lakeward. Nominal range of lights is expressed in statute miles (St M).

SECTION VI. ADVANCE NOTICE OF SCHEDULED CHANGES IN AIDS TO NAVIGATION - Notice of approved projects, of significant changes, which are scheduled for a certain date of accomplishment. It may also contain notices of forthcoming temporary changes such as dredging.

SECTION VII. PROPOSED CHANGES IN AIDS TO NAVIGATION - Periodically, the Coast Guard evaluates its system of aids to navigation to determine whether the conditions for which the aids were established have changed. When changes occur, the feasibility of improving, relocating, replacing or discontinuing the aid is considered. Comments are requested, and should be addressed to: **COMMANDER (oan), NINTH COAST GUARD DISTRICT, 1240 E. NINTH STREET, CLEVELAND, OHIO 44199-2060**, and should include the following information:

- a. Quantity, type, capacity and value of vessels involved, and the extent that these vessels traverse the area under consideration seasonally, by day, and by night.
- b. Where practicable, the type of navigation equipment the vessels are equipped with, such as compasses, radio direction finder, radar, loran, and searchlights.
- c. The number of passengers; and type, quantity, and value of cargo involved.
- d. A chart section or sketch showing the action proposed when necessary to clearly describe the recommended improvement.

SECTION VIII. GENERAL - Information concerning publications, channel conditions, obstructions, hazards to navigation, dangers, anchorages, restricted areas, bridge information, regattas, or other matters of marine information, which do not fit in any other category. Entries pertaining to dredging, construction and bridge discrepancies are listed in two ways. First, the entry will be entered in paragraph form with all pertinent information. If the discrepancy is to last for more than one week, the entry will be placed on the summary list referencing the LNM in which the initial entry appeared. The discrepancy will remain on the summary list until the approximate completion/repair date.

SECTION IX. LIGHT LIST CORRECTIONS - Corrections to the USCG Light List Vol. VII- the Great Lakes. These corrections are printed in order to make "cut and paste" corrections easier.

MAILING LIST FOR LOCAL NOTICE TO MARINERS: A mailing list is kept of all subscribers to the Local Notice to Mariners and is updated each week. Once a year the list is reviewed for accuracy by issuing a verification form to the subscribers. These verification forms are validated, and the list is brought up to current status for the next year's mailing list. Subscribers should check the box on their verification form that most appropriately fits their needs. Subscribers are reminded that the nine-digit zip code is in effect and urged to update their zip codes accordingly. This will help to insure proper delivery of the Local Notice to Mariners and avoid accidental deletion from the mailing list. You may subscribe to the Local Notice to Mariners by calling (216) 902-6070, or accessing it on the web at <http://www.navcen.uscg.mil>.

AIDS TO NAVIGATION INFORMATION DURING WINTER MONTHS: During the winter months, the Ninth Coast Guard District issues a District Aid Discrepancy and Information Summary Report in place of the Local Notice to Mariners. This summary is issued every Tuesday and contains all current discrepancies and general information necessary for the mariner. Broadcast Notice to Mariners will continue to be issued as discrepancies occur. If the discrepancy is still active after one week, the BNM will be canceled and the discrepancy will be included in the weekly Aid Summary. The Aid Summary will be arranged geographically and made available to the mariner by contacting the nearest Coast Guard unit.

BROADCAST NOTICE TO MARINERS (BNM)

The Coast Guard broadcasts information concerning aids to navigation (ATON) maintained by the Coast Guard; information concerning newly established aids; discontinuance, changes, and discrepancies in aids to navigation; marine obstructions; temporary changes in bridge operations; clearances of drawbridges; or any other pertinent information which navigational interests should receive without delay.

Broadcast Notices to Mariners (BNM) are consecutively numbered starting with 0001 for each calendar year commencing at 0001 Greenwich Mean Time on January 1st. A letter preceding a three-digit number indicates the BMN region. Example: Group Buffalo **B**001, Group Detroit **D**001, Group Sault Ste Marie **S**001, Group Milwaukee **M**001, Group Grand Haven **G**001. If a letter does not precede the number, it is a District originated broadcast.

Reported ATON discrepancies are broadcast immediately without waiting for positive verification. The discrepancy will be referred to as "reported" unless the existence of the discrepancy has been positively verified. If the information contained in the BNM is still significant when the Local Notice to Mariners (LNM) reaches printing time, it will be included within the LNM.

PUBLICATION INFORMATION

CHART NUMBER 1 - Due to the increasing production costs in the publication and distribution of its nautical products, the National Ocean Service (NOS) no longer publishes Chart No. 1, United State of America, Nautical Chart Symbols and Abbreviations in a hard copy form. However, to ensure that the information in Chart No. 1 is available to the maritime community, a digital copy can be accessed through the Office of Coast Survey home page, <http://chartmaker.ncd.noaa.gov>, where it can be viewed or downloaded.

UNITED STATES COAST PILOT - The U.S. Coast Pilot includes information on channel descriptions; anchorages; bridge and cable clearances; tides, currents and water levels; prominent features; Pilotage; towage; weather; ice conditions; wharf descriptions; dangerous routes; traffic separation schemes; small craft facilities; and federal regulations applicable to navigation. The majority of Coast Pilot information cannot be shown graphically on standard nautical charts and is not readily available elsewhere. Changes to the Coast Pilot that may affect the safety of navigation are published in the Local and Weekly Notices to Mariners. All amendments to the previous editions, issued through Notices to Mariners, are incorporated in new edition when published.

Coast Pilot 6 covers the Great Lakes region: Lakes Ontario, Erie, Huron, Michigan, Superior and the St. Lawrence River. Commencing with the 28th Edition, Coast Pilot 6 no longer carries descriptions of Canadian waters, shoreline, and related supplemental information. However, text related to significant coterminous waterways such as the Detroit River remains in Coast Pilot 6. Mariners should consult Canadian Great Lakes Sailing Directions (Volumes 1 and 2) for information concerning Canadian waterways.

LIGHT LIST - The Light List contains a list of lights, sound signals, buoys, daybeacons, and other aids to navigation. It is published annually and is intended to furnish more complete information concerning aids to navigation than can be conveniently shown on charts. It is not intended to be used during navigation in place of charts or Coast Pilots. Charts should be consulted for the location of all aids to navigation; it may be dangerous to use aids to navigation without reference to charts. Changes made to aids to navigation during the year are published in the Local Notice to Mariners. Mariners should keep their Light Lists, charts and other nautical publications corrected.

Light List Volume VII, COMDTPUB P16502.7, lists the lights and other marine aids to navigation maintained by or under authority of the United States Coast Guard on the Great Lakes. Lighted aids, and fog signals maintained by Canadian Authority, which may be used by vessels proceeding through joint Canadian and United States waters, are also included; not included are aids having no lateral significance such as special purpose, anchorage, fish net or dredging.

NOTICE TO MARINERS - are prepared jointly with the National Ocean Service (NOS) and the Coast Guard; and published weekly by the National Imagery & Mapping Agency (NIMA). They contain selected items from the Local Notices to Mariners and other reported marine information required by oceangoing vessels operating in both foreign and domestic waters. Notice to Mariners No. 1 is published annually covering a variety of subjects generally not discussed in the Coast Pilot or shown on nautical charts. Oceangoing vessels may obtain Notice to Mariners, at no cost, by contacting: Defense Logistics Agency, DSC-R, Attn: Product Center 9, 8000 Jefferson Davis Highway, Richmond, VA 23297-5337.

NAUTICAL CHARTS - are published primarily for the use of the mariner; they also serve public interests in many other ways. Charts are compiled principally from NOS basic field surveys and supplemented by data from other Government organizations.

IMPORTANCE OF UP-TO-DATE CHARTS

The date of a chart is of vital importance to the navigator. When charted information becomes obsolete, further use of the chart for navigation may be dangerous. Natural and artificial changes, many of them critical, occur constantly. It is important that navigators obtain up-to-date charts at regular intervals and correct them when changes are published in the Notice to Mariners. Charts are revised at regular intervals; users should consult the pamphlet "Date of Latest Editions" for the dates of current chart editions. The pamphlet, issued quarterly, is available free from the **Distribution Division, (N/ACC3), National Ocean Service, NOAA, Lafayette Avenue, Riverdale, Maryland, 20737.** Current edition and applicable notice number listings also appear each week in the NIMA Notice to Mariners, Section I-3. Any defects found in National Ocean Service charts should be reported to **Director, Office of Coast Survey (N/CS 28), National Ocean Service, NOAA, 1315 East-West Highway, Silver Spring, MD 20910-3282,** telephone (301) 713-2737. The Marine Information Report and Suggestion sheet in the NIMA Notice to Mariners may also be used, particularly for non-NOS products.

ELECTRONIC UPDATE SERVICE FOR DIGITAL CHARTS - A weekly electronic update service is now available for NOAA'S digital, raster nautical charts. All Notice to Mariner corrections from the United States Coast Guard, the

National Imagery and Mapping Agency and Canadian Hydrographic Service are included. The service is provided via a partnership between NOAA and Maptech, Inc. Further information is available from NOAA at (301) 713-2770, <http://chartmaker.ncd.noaa.gov> or from Maptech at (978) 933-3000, <http://www.maptech.com>.

SUMMARY OF CORRECTIONS - Charts and publication corrections are compiled in the Summary of Corrections published by the National Imagery & Mapping Agency (NIMA). The Summary of Corrections is divided into five volumes, each published annually. Four of these volumes are regional in coverage; the fifth volume contains corrections for the world and ocean basin charts, U.S. Coast Pilots, and Sailing Directions for the world.

GREAT LAKES, CONNECTING CHANNELS AND ST. LAWRENCE RIVER WATER LEVELS AND DEPTH - The U.S. Army Corps of Engineer provide this monthly publication, a forecast of Great Lakes channel depths for navigation purposes, as well as the GREAT LAKES BULLETIN, a six-month forecast of probable levels of the Great Lakes. Both publication may be obtained free of charge from: Department of the Army, Detroit District Corps of Engineers, Attn: CENCE-ED-L, PO Box 1027, Detroit, MI 48231.

ORDERING NAUTICAL PUBLICATIONS

Note: the U.S. Coast Guard is not a distribution point for charts and publications.

NATIONAL OCEAN SERVICE (NOS) - NOS produces charts and related publications to aid the safe navigation of marine and air commerce; in addition to, providing basic data for engineering and scientific purposes, and for other commercial and industrial needs. The principal facilities of NOS are located in Silver Spring, MD. (Headquarters), Norfolk, VA (Atlantic Marine Center), and Seattle, WA (Pacific Marine Center). These offices maintain files of charts and other publications that are available for the mariners.

NOS Sales Agents should be utilized for the purchase of charts, *Coast Pilots*, *Tide Tables*, *Tidal Current Tables*, *Tidal Current Diagrams*, and *Tidal Current Charts of the National Ocean Service*. Sales agents are located in many U. S. and some foreign ports. A list of authorized sales agents and public sales catalogs may be obtained, free of charge, by contacting: NOAA Distribution Division (N/ACC3), National Ocean Service, Lafayette Avenue, Riverdale, Maryland, 20737-1199; or (301) 713-2737. Various NOS products can also be ordered online through the NOAA website at <http://chartmaker.ncd.noaa.gov>.

NATIONAL IMAGERY and MAPPING AGENCY

The National Imagery and Mapping Agency (NIMA) Maritime Safety Information Division Website provides worldwide remote query access to extensive menus of maritime safety information 24 hours a day.

Databases made available for access, query and download include Chart Corrections, Publication Corrections, NIMA Hydrographic Catalog Corrections, Chart and Publication Reference Data (current edition number, dates, title, scale), NIMA List of Lights, USCG Light Lists, Worldwide Navigational Warning Service (WWNWS) Broadcast Warnings, Maritime Administration (MARAD) Advisories, Department of State Special Warnings, Mobile Offshore Drilling Units (MODUs), Anti-Shipping Activity Messages (ASAMs), World Port Index, and Radio Navigational Aids. Publications that are also made available as PDF files include the US Notice to Mariners, US Chart No 1, The American Practical Navigator (Bowditch), International Code of Signals, Radio Navigational Aids, World Port Index, Distances Between Ports, Sight Reduction Tables for Marine and Air Navigation, Radar Navigation and the Maneuvering Board Manual.

The Maritime Safety Information Division Website can be accessed via the NIMA Homepage (<http://www.nima.mil/>) under the Safety of Navigation icon or directly at (<http://pollux.nss.nima.mil/>).

Any questions concerning the Maritime Safety Information Division Website may be directed to:

MARITIME SAFETY INFORMATION DIVISION
ATTN: NSS Staff
ST D 44
NATIONAL IMAGERY AND MAPPING AGENCY
4600 Sangamore Road
Bethesda, MD 20816-5003

Telephone: (1) 301-227-3296 or DSN 287-3296
Fax: (1) 301-227-4211
E-mail: mailto:webmaster_nss@nima.mil

NIMA public sale charts are available through the Federal Aviation Administration (FAA), National Aeronautical Charting Office (NACO). Please call or write:

FAA Distribution (AVN530)
National Ocean Service
6501 Lafayette Avenue
Riverdale, Maryland 20737-1199
Telephone: (301) 436-8301
Toll free within the United States
1-800-638-8972
Fax (301) 436-6829
E-Mail: distribution@faa.gov
Internet Address: <http://www.naco.faa.gov/>
FAA Chart Agency Internet Address:
<http://www.naco.faa.gov/agentslisting.html>

If you have any questions, please call the Regional Analyst for the Great Lakes - Dan Hallin at (1) 301-227-3122 or e-mail to dhallin@nima.mil.

GOVERNMENT BOOKSTORES LOCATED IN THE GREAT LAKES REGION

Navigation Rules International-Inland (stock # 050-012-00287-8), and *Light List Volume VII Great Lakes* (stock # 050-012-00362-9) can be ordered online at <http://www.access.gpo.gov> or from the following Great Lakes' Government Bookstores:

ILLINOIS - Suite 124, One Congress Center, 401 South State St., Chicago, IL. 60604 Phone (312) 353-5133

MICHIGAN - Suite 160, Federal Building 477 Michigan Ave., Detroit, MI. 48226 Phone (313) 226-7816

OHIO - Rm 1653, Federal Building 1240 E. 9th St, Cleveland, OH. 44199 Phone (216) 522-4922

WISCONSIN - Suite 150, Federal Plaza 310 W. Wisconsin Ave., Milwaukee, WI 53203 Phone (414) 297-1304

CANADIAN PUBLICATIONS

CANADIAN COAST GUARD NOTICE TO MARINERS, similar to the U.S. Notice to Mariners, is published monthly. The publication is available at <http://www.notmar.com>, or to be placed on the mailing list, write to Director General, Marine Navigation Services Directorate, Canadian Coast Guard, Department of Fisheries and Oceans, Ottawa, Ontario K1A 0N7.

CANADIAN LIGHT LIST can be obtained by writing Canadian Coast Guard Transport Canada, Director General, Marine Navigation Services, Ottawa, Canada K1A 0N7.

Canadian Charts and Sailing Directions- Hydrographic are available through the Chart Distribution Office, Department of Fisheries and Oceans, PO Box 8080, 1675 Russel Road, Ottawa, Ontario K1G 3H6.

CANADIAN COAST GUARD NAVTEX BROADCAST

Outlined in the following is the CANADIAN COAST GUARD NAVTEX broadcasts provided by Marine Communications and Traffic Services (MCTS) Centers located in Thunder Bay and Prescott, Ontario. Prescott MCTS Center provides a NAVTEX (H) broadcast using a transmitter site located at Latitude 44-56-13N, Longitude 081-14-09W. This provides NAVTEX services to Lake Huron, Georgian Bay, Lake Erie and Lake Ontario. Thunder Bay MCTS Center provides a NAVTEX (P) broadcast using a transmitter site located at Latitude 48-33-46N, Longitude 088-39-22W. This provides NAVTEX services to Lake Superior and northwestern Lake Huron. The characters F1B after the frequency represent Radio Teletype frequencies.

MCTS Prescott/VBA-Broadcasts

Time: UTC	Frequency	Contents
Continuous	Ch21B Orillia	RADIOTELEPHONY: (English) Weather Forecast (MAFOR) synopsis and area forecast For Georgian Bay (Area 406). Current small craft weather reports. Notices to Shipping for the Trent-Severn waterway System.
0110	518F1B	NAVTEX (H): Notice to Shipping Ice (during ice season)
0510	518F1B	NAVTEX (H): - Weather.
0910	518F1B	NAVTEX (H): - Weather.
1310	518F1B	NAVTEX (H): Notice to Shipping Ice (during ice season)
1710	518F1B	NAVTEX (H): - Weather
2110	518F1B	NAVTEX (H): - Weather

Prescott Marine Communication and Traffic Service Center Marine Facsimile Package

A Great Lake Marine weather package is available by FAX from Prescott Marine Communication and Traffic Services Center. Data is provided by the Ontario Weather Center and consists of the following:

- a) Marine forecast for the Great Lakes and St. Lawrence River, (Eastward to Montreal only)
- b) Marine Weather Warnings
- c) Prognosis Chart
- d) Marine Observation Chart
- e) Ice Chart
- f) Ice Report

Calling (613) 925-0666 and operating the POLL function on your facsimile machine may poll the weather package. Mariners are cautioned that information may not be the latest issue.

MCTS Thunder Bay/VBA-Broadcasts

Time: UTC	Frequency	Contents
0230	518F1B	NAVTEX (P): Weather.
0830	518F1B	NAVTEX (P): Notice to Shipping Ice (during ice season)
1030	518F1B	NAVTEX (P): - Weather.

1430	518F1B	NAVTEX (P): - Weather.
1830	518F1B	NAVTEX (P): Notice to Shipping Ice (during ice season)
2230	518F1B	NAVTEX (P): - Weather
Continuous (CMB West)	Ch21B Horn Sault Ste Marie Thunder Bay Ch83B Bald Head	Weather forecasts (MAFOR) for Lakes Superior and Huron, Georgian Bay (areas 405,406,408). LAWEB broadcast for reporting points from Duluth (Lake Superior) to Killarney (Georgian Bay). Current ship weather observations. Notices to Shipping for Lake Superior and the ST. Mary's River. Water level Lakes Superior and Huron. Ice hazard bulletin for Lake Superior, and White Fish Bay. Note: When CMB is out of service, scheduled broadcast will Be made at Traffic List times.
Continuous (CMB East)	Ch21B Tobermory Killarney Pointe au Baril Ch83B Silver Water Meaford	Weather forecasts (MAFOR) for Lakes Superior and Huron, Georgian Bay (areas 405,406,408). LAWEB broadcast for reporting points from Sault Ste Marie To Sarnia and Georgian Bay. Current ship weather observations. Notices to Shipping for Lake Huron north of latitude 44-00N, Georgian Bay (including Port Severn Lock), the North Channel and the St. Mary's River. Water level Lakes Superior and Huron. Ice hazard bulletin for Lake Huron and Georgian Bay. Note: When CMB is out of service, scheduled broadcast will Be made at Traffic List times.

LAW ENFORCEMENT

COAST GUARD LAW ENFORCEMENT MISSION

One of the Coast Guard's primary missions is the enforcement of laws and treaties upon the high seas and waters subject to Federal statutes. These Federal Laws include illegal drug interdiction, illegal immigrant interdiction, vessel safety, water pollution, fisheries, and enforcement of the 200-mile exclusive economic zone. Section 89 of Title 14 of the United States Code authorizes the Coast Guard to make inquiries, examinations, inspections, searches, seizures, and arrests upon the high seas and waters over which the United States has jurisdiction in order to enforce Federal Laws. A vessel operator who fails to stop when so ordered by the Coast Guard may be subject to civil and criminal penalties. All Coast Guard officers and petty officers are Federal law enforcement officers. This chapter includes information concerning Coast Guard Law Enforcement policies and procedures.

DISTINCTIVE MARKS OF COAST GUARD VESSELS

U.S. Coast Guard vessels are identified by a distinctive red, white, and blue diagonal "racing" stripe located on either side of the vessel near the bow, the words "U.S. COAST GUARD" on the side of the vessel and the Coast Guard Ensign. Personnel aboard the vessel will be in uniform. Small boats that transfer the boarding team from the Coast Guard Cutter will also display the Coast Guard Ensign and may or may not display the distinctive stripe. Coast Guard personnel may also be found aboard other vessels such as U.S. Navy, Coast Guard Auxiliary, state and local law enforcement vessels, etc. When Coast Guard personnel are aboard a vessel of another agency, that vessel will display the Coast Guard Ensign. Coast Guard vessels may have their navigational running lights extinguished at night while on patrol. Running lights, if off, will be energized subsequent to the Coast Guard vessel approaching and attempting communications. In addition, the Coast Guard Ensign and the "racing" stripe will be illuminated if possible.

COAST GUARD BOARDING POLICY

The purpose for conducting law enforcement boardings is to enforce all applicable U.S. Laws and regulations and to educate the mariner on the proper and safe practices associated with operating a vessel. The majority of Coast Guard boardings are random and are conducted at sea while the vessel is underway. While most vessels are engaged in legitimate recreation or commercial use, there have been instances where illegal drug trafficking and illegal fishing have been discovered and terminated as a result of a random boarding. The boarding team will consist of a Boarding Officer who is in charge and several additional members. Coast Guard boarding team members will be dressed in uniforms marked with the words "U.S. COAST GUARD" on both the shirts and hats. During transit from the cutter to the vessel being boarded they will be wearing personal flotation devices or exposure suits, both of which will also be marked with "U.S. COAST GUARD." Prior to boarding a vessel the Coast Guard cutter will attempt to establish communications with the operator or vessel via radio or loud hailer. Once communications are established, the Coast Guard will want to speak with the master of the vessel. Some initial questions will be asked to determine the nationality of the vessel and crew and the vessel's homeport. Instructions will be passed to the vessel concerning the boarding. A small boat will normally transfer the boarding team to the vessel. The boarding officer may give additional instructions while coming alongside in the small boat. Do not assist the small boat in coming alongside unless requested to do so by the boarding officer.

ONCE ABOARD THE VESSEL

Once the boarding team is aboard, the boarding officer will need to identify the operator or master of the vessel and see personal identification for each crewman, the vessel's Official Document or state registration. The boarding team will check the vessel operator for compliance with applicable Federal laws. When the boarding is complete the boarding officer will present the master with a copy of the Coast Guard Boarding Report and an Enforcement Action Report if applicable and explain any violations that were noted as well as the penalty process. Coast Guard boarding teams are law enforcement professionals and are well trained. The boarding teams follow standard procedures to conduct thorough boardings with as little disruption as possible to the crew of the vessel being boarded.

REPEAT BOARDINGS

Coast Guard units attempt to avoid repeatedly boarding the same vessel. When a vessel has been recently boarded and complete safety, documentation, pollution, and fisheries (if applicable) inspections were completed, the boarding team will check those items found in violation on the previous boarding and may spot check other items. Mariners should keep a copy of their boarding reports onboard and present them to the boarding officer upon embarking their vessel. Any complaints concerning a Coast Guard boarding should be directed to: Commander (ole), Ninth Coast Guard District, 1240 East Ninth Street, Cleveland, OH 44199-2060. Tel: (216) 902-6090, Mon-Fri. 8am - 4pm.

SMUGGLING

There is increasing evidence of drug, contraband and alien migrant smuggling throughout the Great Lakes. Much of this illegal activity is reportedly taking place in narrow waterways along the U.S./Canadian border, such as the St. Lawrence, Niagara, Detroit and St. Mary's Rivers. The Coast Guard aims to prevent all types maritime smuggling by interdicting smuggling vessels at sea. Mariners observing suspicious activity or having information that a vessel may be involved in these activities are requested to contact the nearest Coast Guard unit or Coast Guard

OPERATING A VESSEL WHILE UNDER THE INFLUENCE

Federal law provides civil and criminal penalties for persons who operate a vessel under the influence of alcohol or drugs. The prohibitions pertain to both recreational and commercial vessels; however, the provisions are slightly different for the two categories.

A. Recreational vessels: As applied to recreational vessels, "operator" is defined as an individual who has an essential role in the operation of a vessel underway, including but not limited to navigation of the vessel or control of the vessel's propulsion system. An individual is considered under the influence when:

1. The individual has an alcohol concentration of .10% (or the lower state limit) by weight or more in their blood, or
2. The effect of the intoxicant consumed by the individual on the person's manner, disposition, speech, muscular movement, general appearance or behavior is apparent by observation.

If the operator is under the influence, the voyage may be terminated for unsafe condition and the operator is subject to a civil penalty up to \$5,000 or a criminal penalty up to \$5,000 and/or one year in prison.

B. Commercial vessels: The principal differences in the enforcement of these regulations for operators of commercial vessels are:

1. All crewmembers, including any pilot and a watchstander who is not a regular member of the crew, are considered to be "operating a vessel."
2. An individual is considered intoxicated if the blood alcohol concentration is .04% by weight or more in the blood.

TERMINATION OF USE

A Coast Guard boarding officer who observes a recreational boat operating in an unsafe condition, specifically defined by law or regulation, and determines that an "ESPECIALLY HAZARDOUS CONDITION" exists, may direct the operator to take immediate steps to correct the condition, including returning to the nearest mooring facility. The specific unsafe conditions for which termination may be imposed are:

1. Insufficient number of personnel flotation devices (PFDs)
2. Insufficient firefighting devices
3. Overloaded conditions
4. Improper navigational light display
5. Fuel leakage
6. Fuel in bilges
7. Improper ventilation
8. Improper flame arrester
9. Operating a vessel while intoxicated
10. Manifestly unsafe voyage

An operator who refuses to comply with the order to terminate unsafe use of the boat may be cited for failure to comply with directions of a Coast Guard boarding officer, as well as for the specific statutory or regulatory violation or provisions which were the basis for the termination order.

PERSONAL USE QUANTITIES OF ILLEGAL NARCOTICS

The discovery of any amount of illegal drugs - including "personal use" quantities - on a U.S. vessel, or any vessel within United States waters will result in enforcement action by the Coast Guard. This enforcement action may lead to the seizure of the vessel and the arrest of those onboard in possession. In applying this "Zero-Tolerance" policy, the Coast Guard considers all of the circumstances in determining what enforcement action to take.

OUR POLICY: When, in the course of a Coast Guard boarding, personal use quantities of illegal narcotics are found, the Boarding Officer will notify local authorities or issue a Summons for the vessel owner to appear before the District Director of Customs in that Customs District. At this proceeding, the District Director will decide whether or not to seize the vessel and issue a fine to the vessel owner. In some cases, the Coast Guard will seize the vessel without issuing a summons form. These cases are:

- Where the owner, master, or person in charge is in possession of the controlled substance.
- Where the owner, master, or person in charge appears to be impaired by use of the controlled substance.
- Where the owner, master, or person in charge refuses to sign the summons form.
- Where previous personal use violations involving the vessel have occurred.

When the Coast Guard seizes a vessel, the vessel is turned over to the Customs Service for further action.

YOUR PRECAUTIONS: Boat owners have the responsibility to ensure that illegal drugs are not brought aboard their vessels. During the forfeiture proceeding, vessel owners have the opportunity to present information to indicate that they are both innocent and non-negligent relative to the illicit transportation of a controlled substance by the vessel. Owners should therefore consider what actions they can reasonably take to reduce the risks of the illegal presence of a controlled substance onboard. The following suggestions are provided for boat charter operators, fishing boat owner/ operators, recreational boat owner/operators, and those engaged in coastal trade:

- Post a zero tolerance notice in a visible, public area onboard the vessel.
- Ensure that all advertising contains a zero tolerance statement.
- Make zero tolerance a condition of all contracts for boat leases, rentals and charters.
- Have each salaried crewmember sign a statement that he or she will not introduce or use illegal drugs onboard.
- Provide drug education for the crew.
- Establish a written company policy in support of zero tolerance.
- Secure those compartments onboard the vessel, which are restricted from public access.
- Inform friends and others onboard your boat that any illegal drug use will not be tolerated.
- Provide cooperation and assistance to Coast Guard and Customs officers as they carry out their boarding duties.

The Zero Tolerance policy has not changed the Coast Guard's primary law enforcement emphasis on the interdiction of smugglers. Nor will it result in any change in the normal deployment of ships or aircraft. It means that the Coast Guard, in the course of regular patrols, boardings, and inspections, will now seize the vessel, or issue a summons in lieu of seizure and may arrest people onboard when even "personal use" quantities of illegal drugs are found.

COAST GUARD POLICY ON STOLEN BOATS

Due to its status as a maritime law enforcement agency, and because of its high visibility and availability to the boating public, the Coast Guard is often the first agency approached by persons whose boats have been stolen. While the Coast Guard does not have sole responsibility for dealing with such matters, the Coast Guard will issue a vessel lookout, conduct harbor checks as appropriate, and coordinate action with appropriate federal, state, and local law authorities.

REPORTING SUSPICIOUS ACTIVITY

Since September 11, 2001, life has changed in the United States, as we know it. Law enforcement agencies have stepped up security around the nation. Now, citizens across the Great Lakes can do their part and be the eyes and ears that help keep America safe with a homeland security coast watch initiative, an Eyes on the Water campaign.

PLACES OF PARTICULAR INTEREST- As a frequent visitor or homeowner on the waterfront, you have a good idea of normal activities and what seem unusual or suspicious. Pay particular interest for strange activities around key waterfront locales, such as: Under and around bridges, around entrances to tunnels, near power plants, near water intakes/treatment plants, near oil or chemical facilities, near fuel docks, and near military bases.

COMMERCIAL SHIPS AND PORTS- Be aware of unusual behavior by freighters, barges and other commercial ships, such as: Filming or shooting photos from or of ships, divers near ships, recovering or tossing items into the water or on the shoreline, signaling between ships or to shore, transfer of people or things between ships, or between ship and shore outside of port, security changes or lack of usual security, missing or broken fencing, or lighting around facilities, operations in an unusual area, anchoring in an area not typically used as an anchorage, and unusual night operations.

RECREATIONAL BOATS- Be aware of unusual behavior by pleasure boats, such as: Fishing/Hunting in locations not typically used for those sports, unattended boats, unusual vehicle or boat characteristics, unusual filming or photography, unusual diving near bridges, etc., recovering or tossing items into water or on to shore, flashing lights (signaling) between boats, or boats and shore, unusual transfer of people or things between boats, or between boats and shore, frequent trips between borders, operating or anchoring in unusual areas, or unusual night activities.

Any suspicious activities should be reported to your local Coast Guard via channel 16 on your VHF marine radio or to the National Response Center at 1-800-424-8802.

REPORTING PROCEDURES - Suspicious activity may be reported to the National Response Center by calling 1-800-424-8802, 24 hours a day. The person reporting these activities will not only remain anonymous, but will also perform a great service to preserve and protect their community.

Be Alert: In observing, note the time and location of activity and write this information down. Take extra care to note any aircraft registration, vehicle or boat names and numbers or distinctive features of the suspects (such as clothing and build). Give an accurate account of your information to the officer.

Any suspicious activity noticed on the water should be reported to your local Coast Guard unit or to Coast Guard Investigative Service at (216) 902-6136. The 24-hour service number is (216) 902-6117/18 or 1-800-321-4400.

U. S. Customs Service has a program to reduce the supply of illicit drugs being smuggled into the United States, and it starts with you.

REWARDS - Cash rewards (ranging from \$250 to \$2,500) may be given for anonymous information leading to the arrest and conviction of drug smugglers. Informant awards up to \$250,000 may be authorized for original information provided by a documented confidential source to U.S. Customs leading to a recovery; e.g., seizure and forfeiture of a conveyance. The amount of any reward or award will depend on the circumstances of each case and the results.

REPORTING PROCEDURES - Suspicious activity may be reported to the Customs Service by calling **1-800-BE-ALERT**, 24 hours a day. The person reporting these activities will not only remain anonymous, but will also perform a great service to preserve and protect their community.

(1) **Be Alert:** In observing, note the time and location of activity and write this information down. Take extra care to note any aircraft registration, vehicle or boat names and numbers or distinctive features of the suspects (such as clothing and build).

(2) **Be Accurate:** Call U.S. Customs toll free at **1-800-BE-ALERT**. Tell the officer that you have information about narcotics smuggling activities. You will be given a code number to protect your identity. After you receive your caller number, give an accurate account of your information to the officers.

(3) **Stay in Contact:** Call Customs again at **1-800-BE-ALERT** ten days after your initial contact. Identify yourself by your assigned code. At this time you can learn if any action resulted from your information, and if so, you can arrange for payment of your cash reward.

For all suspected terrorism plots or activities, contact the U.S. Coast Guard National Response Center (NRC) number listed below (you will be forwarded to your local FBI Field Office.) Contact your local Marine Safety Office for specific items/activities that should be considered suspect.



s on the Water?

USCG NRC: 1-800-424-8802

SECURITY ZONES AT POINT BEACH AND KEWAUNEE NUCLEAR PLANTS

The U. S. Coast Guard Captain of the Port (COTP) of Milwaukee, Wisconsin has created a Security Zone in the waters immediately surrounding the Point Beach and Kewaunee Power Stations located in Point Beach and Kewaunee, Wisconsin.

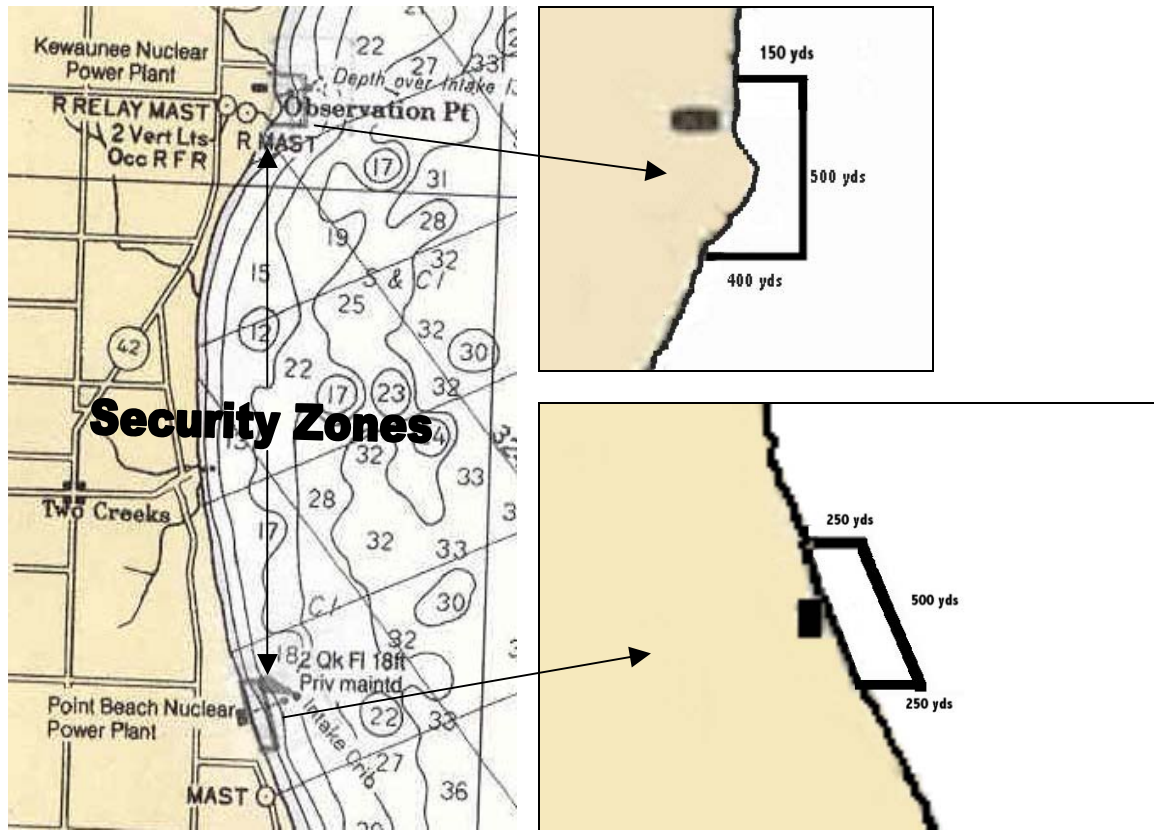
These Security Zones were permanently established on July 31, 2002 (67 FR 49576, July 31, 2002.)

This is a precautionary measure in support of the heightened security measures throughout our nation.

The Point Beach Nuclear Power Plant Security Zone encompasses the portion of Lake Michigan from 44° 17.06' N, 087° 32.15' W, northeast to 44° 17.12' N, 087° 31.59' W, southeast to 44° 16.48' N, 087° 31.42' W, southwest to 44° 16.42' N, 087° 32.02' W, Back to the starting point 44° 17.06' N, 087° 32.15' W.

The Kewaunee Nuclear Power Plant Security Zone encompasses a trapezoid of the portion of Lake Michigan from 44° 20.647' N, 087° 31.980' W, east to 44° 20.647' N, 087° 31.886' W, south to 44° 20.391' N, 087° 31.866' W, west to 44° 20.391' N, 087° 32.067' W, Back to the starting point 44° 20.647' N, 087° 31.980' W.

Diagrams are provided below. If you still have questions please contact MSO Milwaukee between the hours of 7 A.M. and 3:30 P.M.



RECREATIONAL BOATING SAFETY

The Coast Guard promotes Boating Safety through public education and law enforcement.

The Coast Guard Auxiliary, U. S. Power Squadrons, The States, and the American Red Cross offer a variety of Boating Safety classes. For specific course information and schedules, call toll free **1 (800) 336-2628**, the BOAT U.S. nationwide hotline. After dialing the 800 number, provide the operator with the area where you wish to take a course. A computer will then match up your needs with the most conveniently located courses. In addition to providing basic course location information, the 800-Project's computer will supply the caller with a local contact from either the U. S. Coast Guard Auxiliary or the Power Squadron.

Most of the laws, equipment and regulations that apply to recreational boats are contained in the pamphlet "Federal Requirements for Recreational Boats." A copy may be obtained from most marine dealers or by contacting: COMMANDER, NINTH COAST GUARD DISTRICT (ole), Boating Safety Affairs, 1240 East Ninth Street, Cleveland, OH 44199-2060 (216) 902-6094.

The Navigational Rules apply to the operation of all watercraft, no matter what the size. The Navigational Rules include Steering and Sailing Rules, Lights and Shapes, and Sound Signals. These rules are frequently referred to as the Nautical Rules of the Road.

Vessel Safety Checks (VSC) is a free service offered by the Coast Guard Auxiliary, the U. S. Power Squadrons and some state agencies. Your vessel will be examined for compliance with Federal and State recommended safety standards. If boats do not pass, no report of deficiencies will be made to any law enforcement agency. To obtain an examination, contact 1-800-336-2628.

Construction standards apply to recreational boat manufacturers and importers. At a minimum, they require a hull identification number using a Coast Guard issued manufacturer's identification code. For further information contact the nearest Coast Guard Station, or write to Commandant (G-OPB-3) U.S. Coast Guard, Washington D.C. 20593.

BOATING SAFETY HOTLINE

The Hotline will:

- a. Accept reports of safety-related defects in recreational boats.
- b. List boats involved in safety defect campaigns.
- c. Instruct you how to get defects in your boat corrected.
- d. Provide membership information on the Coast Guard Auxiliary.
- e. Accept comments on Coast Guard Boardings.

The Hotline will not:

- a. Recommend what boat to buy or who to buy it from, or settle disputes between owners, dealers, or manufacturers.

Hotline Phone Number: 1 (800) 368-5647. Monday - Friday (except holidays) 8 a.m. to 4 p.m. EST.

Additional information may be found on the WWW at: <http://www.uscg.mil/d9/d9boating/BoatingSafety.html>

HELPFUL HINTS FOR BOATERS

The operator is responsible for the boat and the persons on board. Remember, safety is not a set of rules and regulations, safety is an attitude. Prudence and common sense will go a long way in making your outing safer and more enjoyable.

GOOD HOUSEKEEPING - There are few places where good housekeeping is more important than afloat. This includes properly stowing and securing all equipment and supplies, keeping decks and spaces clean and free from clutter and trash, performing safety checks and required maintenance on a regular schedule and ensuring that all repairs are properly made.

TOOLS AND SPARE PARTS - Carry a few tools and some spare parts and learn how to make minor repairs. A great many rescue cases are caused by minor breakdowns, which the operator should have been able to repair.

FUEL MANAGEMENT - Use the "One-third rule" in fuel management. Use one-third of fuel to go, one-third to get back and keep one-third in reserve.

ALCOHOL AND DRUGS - Alcohol and other drugs reduce judgment and the ability to react. Furthermore, sun, wind, vibration and noise are very fatiguing, increasing the debilitating effects of alcohol and drugs.

PERSONAL FLOTATION DEVICES

Effective 1 May 1995, all recreational boats, regardless of length, including canoes and kayaks, must carry one type I, II, III, or V wearable personal flotation device (PFD) for each person on board. A type V PFD may replace any PFD as long as it is being worn and approved for the activity in which the boat is engaged. In addition to wearable PFD's, all boats 16 feet and longer must be equipped with one type IV PFD.

FLOAT PLAN

By telling someone where you are going and when you will be back, what your boat looks like and other identifying information you will make finding your boat much easier, should the need arise. While the Coast Guard does not provide this service, it does encourage mariners to leave their sailing plans with friends or relatives to whom you can report your safe arrival. Should your friends or relatives fail to be notified of your safe arrival when due or within a reasonable amount of time, they should notify the nearest Coast Guard activity with the information contained in a float plan.

CAPACITY LABELS

REQUIREMENTS FOR CAPACITY LABEL - Monohull boats less than 20 feet, and built after October 31, 1972, must have a capacity label affixed. This is the responsibility of the manufacturer. Kayaks, sailboats, inflatables, and canoes are exempt from this requirement. While Federal Regulations do not prohibit that boat operator from exceeding these capacities, state law may prohibit this practice. Check with your state's boating authority.

SAFE CARRIAGE FORMULA - If your boat is not required to be equipped with a capacity plate, use this formula to determine the number of people that can be carried safely. NOTE: This formula is meant for good weather conditions only. $PEOPLE = \frac{L \times W}{15}$

MAXIMUM HORSEPOWER - The maximum horsepower information listed on the capacity label is a guide for selecting an engine for a boat. It's not a violation of Federal Regulation to install or use a larger engine. Boaters should, however, check state regulations. They should also take a look at their insurance policy regarding horsepower.

COMBINATION LABELS - Manufacturers often combine the capacity requirements and horsepower information on the same label as the mandatory certification label. Boaters should, however, check state regulations. They should also take a look at their insurance policy regarding horsepower.

US COAST GUARD AUXILIARY

The US Coast Guard Auxiliary is a volunteer organization associated with the Coast Guard that provides such services as boating safety classes, courtesy marine examinations of pleasure craft, and patrols in their local area. Anyone interested in becoming a part of this valued organization is encouraged to contact the Auxiliary Liaison at the nearest Coast Guard Group.

LIMITED ACCESS AREAS- GENERAL

Limited Access Areas (LAA's) established under 33 CFR part 165 include Safety Zones and Security Zones. These are established by rulemaking and are published in the Federal Register. If urgency prevents publication in the *Federal Register* prior to the effective date, other means of dissemination, such as Notices to Mariners, news releases, and leaflets. Temporary LAA's are not published in the bound CFR's.

SAFETY ZONES – GENERAL

A Safety Zone is a water area, shore area, or water and shore area to which, for safety or environmental purposes, access is limited to authorized persons, vehicles, or vessels. It may be stationary and described by fixed limits or it may be described as a zone around a vessel in motion.

Unless otherwise provided, (a) No person may enter a safety zone unless authorized by the Captain of the Port (COTP) or the District Commander; (b) No person may bring or cause to be brought into a safety zone any vehicle, vessel, or object unless authorized by the COTP or the District Commander; (c) No person may remain in a safety zone or allow any vehicle, vessel, or object to remain in a safety zone unless authorized by the COTP or the District Commander; and (d) Each person in a safety zone who has notice of a lawful order or direction shall obey the order or direction of the COTP or District Commander, or their on-scene representative, issued to carry out the purposes of this subpart. Violators are subject to civil penalties up to a \$25,000 fine, or a Class D felony.

BOATER'S GUIDE TO SAFETY ZONES ON THE CUYAHOGA RIVER

To help ensure safety on the Cuyahoga and Old Rivers in the Cleveland, eleven safety zones were established which prohibit the parking or mooring of boats. The safety zones are usually located on turns in the river, where passing commercial traffic needs additional maneuvering room. These zones were not just created to ensure commercial shipping could use the waterways, but to ensure recreational boaters were not caught in a tight situations, where injury, or property damage could result.

Although the safety zones prohibit boat mooring at all times, several restaurants in the Flats have requested waivers to allow limited mooring. These waivers allow limited numbers of boats to tie up, but require that ALL recreational boats clear out of the safety zone when commercial traffic (freighters, larger tugs and barges) are passing by. Usually this requires the boats to be moved to non-safety zone area, or to get underway for a few minutes until the commercial traffic passes by.

Waiver areas include Shooter's on the west bank, and Fagan's and Landry's on the east bank. Boats tying up there are considered guests of the restaurant and must abide to direction of the dockworkers and staff. They are there for your safety. Boaters need to stay on, or close, to their boats so they can be moved if needed. When notified by the dockworkers that the dock needs to be cleared, boaters must cast off the pier and avoid the passing traffic. The dockworkers have a paging system, and listen to marine radios, to know when commercial traffic is approaching. They need your assistance is getting underway when told to do so, and will try to get you tied back up as quickly as possible when the traffic passes. Do not wait until the last minute to get your boat underway.

The Eleven safety zones in Cleveland:

- 1) East bank of the Cuyahoga, From the Conrail One bridge to the water taxi landing area, some 600 feet to the south of the bridge. This is a safety zone waiver area fronted by Fagan's, Laundry's and Fado's. Boat parking is allowed, but all vessels must move for passing commercial traffic.

- 2) Old River, north bank. The corner just opposite Shooters stage.
- 3) Old River, south bank, the corner some 100 yards west of the Willow Street Bridge.
- 4) Old and Cuyahoga River. The Shooters dock from Tiffany's to the boardwalk area in front of shooters. This is a waiver area; Boat parking is allowed, but all vessels must move for passing commercial traffic. The boardwalk area to the south is not a safety zone area, but boaters must moor in such a way to not interfere other traffic. Extensive rafting is not permitted.
- 5) Cuyahoga River west bank. Corner near Nautica stage.
- 6) Cuyahoga River west bank. Corner near Nautica Stage.
- 7) Cuyahoga River west bank. Corner under old railroad bridge near Nautica stage.
- 8) Cuyahoga River East Bank. 270 feet of the riverbank from under the Columbus Street Bridge to just south of Commodore's marina.
- 9) Cuyahoga River East Bank, corner of bank near Flats Industrial Rail Road Bridge.
- 10) Cuyahoga River West Bank. Corner near rowing association launching area, some 300 yards west of the Carter road bridge.
- 11) Cuyahoga River west bank. Corner just west of Club Aqua, collision bend.

For additional information, please contact the Lieutenant Dave Pugh at Marine Safety Office Cleveland, (216) 522-4405.

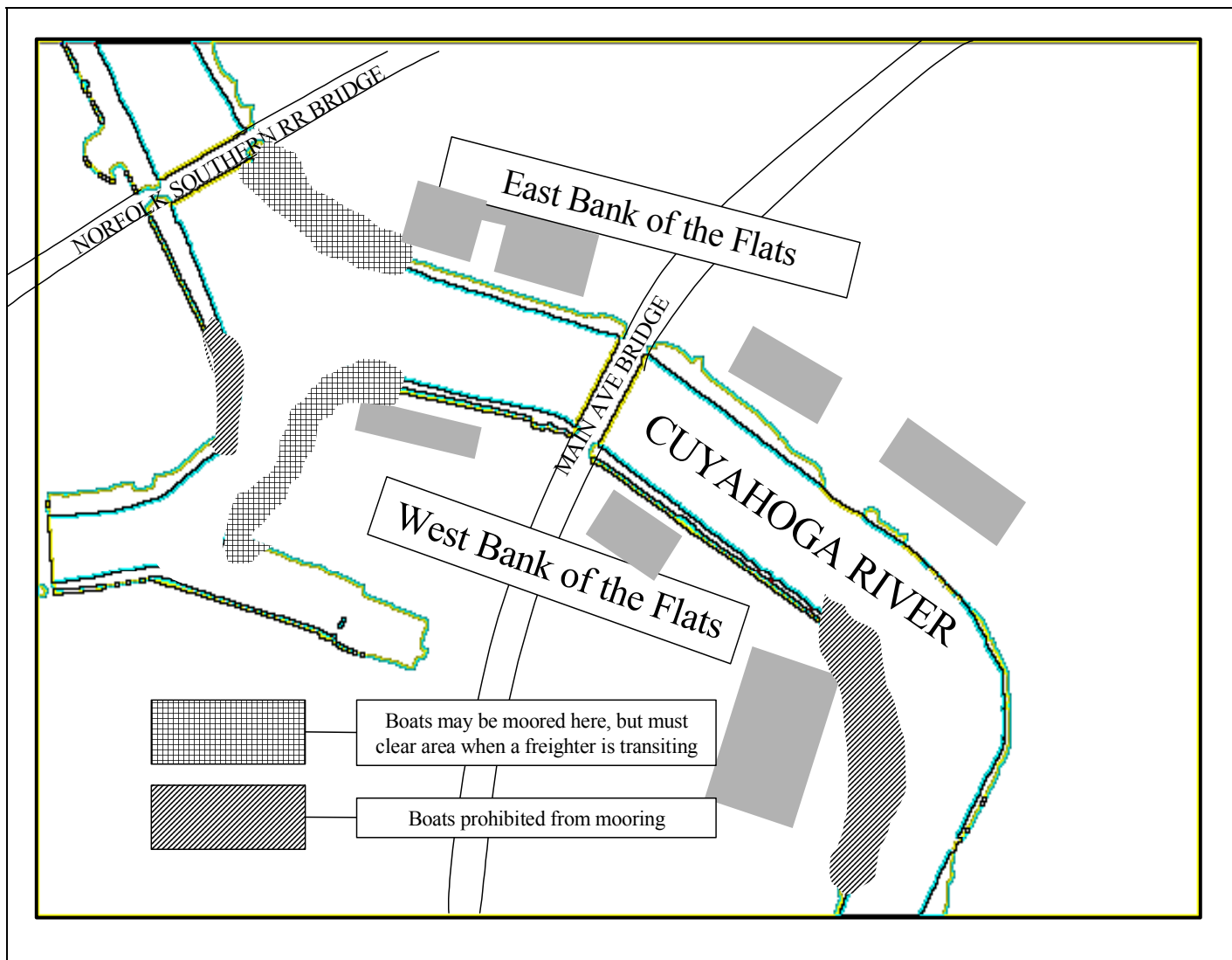
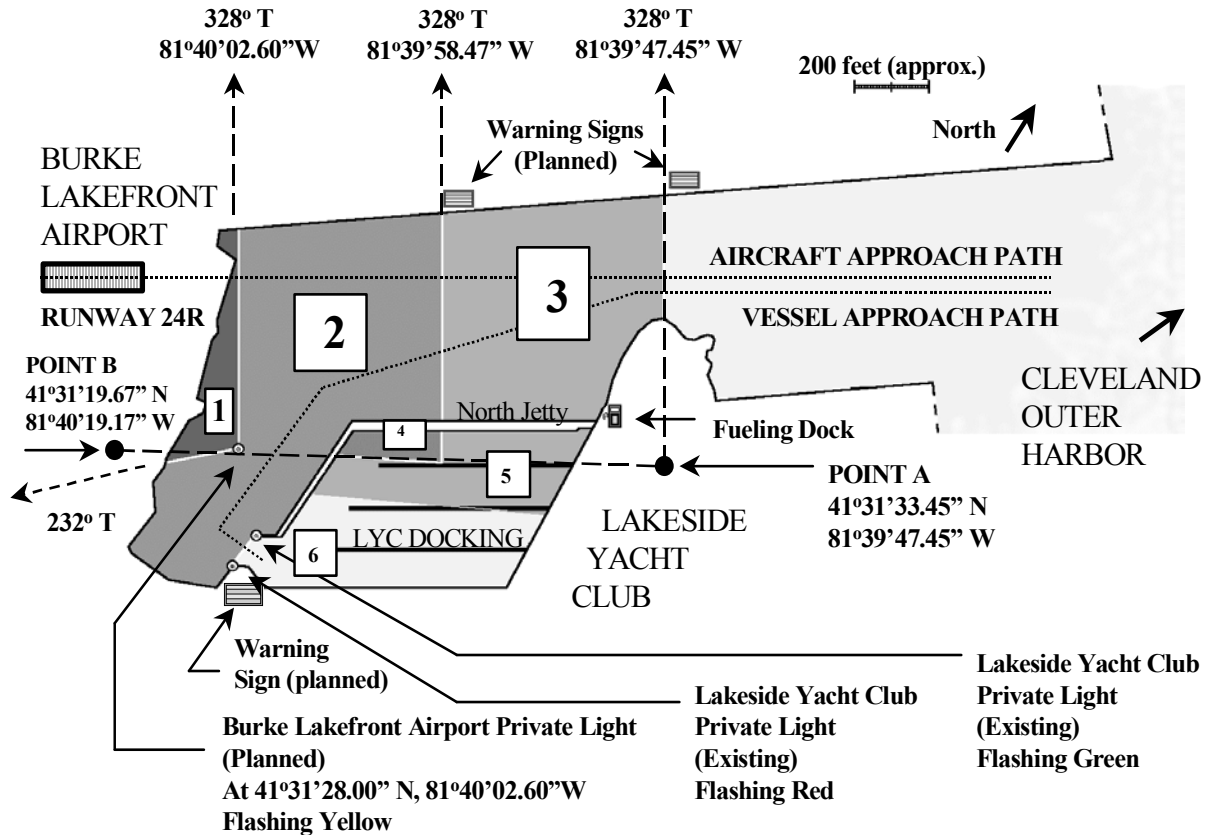


Illustration 1

Approach to Lakeside Yacht Club and Minimum Air Clearances for Burke Lakefront Airport Instrument Approach



Restricted Areas, Based on an Extreme High Water Level of 577' Mean Sea Level (MSL)

Area	MSL Air Clearance	Applicable Mast Heights	Restrictions
1	618	41 feet	No entry
2	622	45 feet	No entry unless cleared, during designated times
3	640	63 feet	No entry unless cleared, during designated times
4	630	53 feet	No entry (no dockage)
5	640	63 feet	No entry (no dockage)
6	672	95 feet	No entry (no use of Yacht Club areas)

[Burke]

SECURITY ZONES – GENERAL

A security zone is an area of land, water, or land and water which is so designated by the Captain of the Port or District Commander for such time as is necessary to prevent damage or injury to any vessel or waterfront facility, to safeguard ports, harbors, territories, or waters of the United States or to secure the observance of the rights and obligations of the United States. The purpose of a security zone is to safeguard from destruction, loss, or injury from sabotage or other subversive acts, accidents, or other causes of a similar nature: (1) Vessels, (2) Harbors, (3) Ports, and (4) Waterfront facilities: in the United States and all territory and water, continental or insular, that is subject to the jurisdiction of the United States.

Unless otherwise provided: (a) No person or vessel may enter or remain in a security zone without the permission of the Captain of the Port or their on-scene representative; (b) Each person and vessel in a security zone shall obey any direction or order of the Captain of the Port or their on-scene representative; (c) The Captain of the Port or their on-scene representative may take possession and control of any vessel in the security zone; (d) The Captain of the Port or their on-scene representative may re-move any person, vessel, article, or thing from a security zone; (e) No person may board, or take or place any article or thing on board, any vessel in a security zone without the permission of the Captain of the Port or their on-scene representative; and (f) No person may take or place any article or thing upon any waterfront facility in a security zone without the permission of the Captain of the Port or their on-scene representative.

Violators are subject to criminal penalties up to 10 years imprisonment and a \$10,000 fine.

Regulatory

PASSENGER VESSELS

The law makes a clear distinction between the operation of a private vessel for pleasure purposes, and the operation of a vessel engaged in carrying passengers. A "passenger" means any individual carried on board the vessel except the owner, operator, a crewman, or a guest on board a vessel that is being operated only for pleasure who has not contributed consideration for carriage on board. The number of passengers carried and the size of the vessel determines which inspection, manning and licensing regulations apply.

CARRYING 6 OR LESS PASSENGERS - A vessel carrying six or fewer passengers is not required to be inspected by the Coast Guard, however, is required to carry additional safety equipment such as: Type I life preservers with retro-reflective tape and lights. These vessels are required to be operated by a person licensed by the Coast Guard as an Operator of Uninspected Passenger Vessels, erroneously called a "Captain's License."

CARRYING 7 OR MORE PASSENGERS - Any vessel that carries seven or more passengers must be inspected and certificated by the Coast Guard. These vessels are commonly referred to as small passenger vessels. The term "T-Boat" is used to describe a small passenger vessel that carries 150 or fewer passengers or 49 or less overnight passengers. Small passenger vessels that carry 151 or more passengers or 50 or more overnight passengers are referred to as "K-Boats" or "K-Vessels." The T or K designation refers to the Subchapter in Title 46 Code of Federal Regulations to which the vessels are inspected. Subchapters K and T contain extensive equipment and construction standards that these vessels are required to meet. Before operating with passengers, small passenger vessels must be inspected and be issued a Coast Guard Certificate of Inspection. In addition, the Coast Guard conducts annual reinspections and periodic dry-dock exams to ensure continued compliance with the regulations. These vessels must be operated by and individual licensed by the Coast Guard as a Master for that size vessel. . Prospective passengers should look for a valid Coast Guard small passenger vessel inspection sticker affixed to the vessel.



DOCUMENTATION OF VESSELS CARRYING PASSENGERS - If your vessel is engaged in a 'passenger' situation, you may be required to comply with the documentation regulations. The Coast Guard must document any

vessel of at least 5 net tons, which carries passengers. The term '5 net tons' refers to the results of a measurement formula and not the actual weight of the vessel. Generally, any vessel 32 feet or longer will measure at least 5 net tons. Foreign built vessel cannot be documented for carrying passengers on a domestic route.

SOURCES OF COAST GUARD INFORMATION ON PASSENGER VESSELS - To obtain information on passenger vessels rules and regulations, contact the nearest Coast Guard Marine Safety Office below:

BUFFALO

1 Fuhrman Blvd.
Buffalo, NY 14203
Phone: 716-843-9570

DETROIT

110 Mt. Elliott Ave.
Detroit, MI 48207-4380
Phone: 313-568-9580
Fax 313-568-9581

PITTSBURGH

Suite 1150/Kossman Bldg.
Forbes Ave. & Stanwix Sts.
Pittsburgh, PA 15222-1371
Phone: 412-644-5808

CINCINNATI

3653 River Rd.
Cincinnati, OH 45204-1094
Phone: 513-921-9033

DULUTH

Canal Park
Duluth, MN 55802-2352
Phone: 218-720-5286/87

SAULT STE. MARIE

c/o U.S. Coast Guard Group
Sault Ste. Marie, MI 49783-9501
Phone: 906-635-3210

CLEVELAND

1055 East Ninth St.
Cleveland, OH 44114-1092
Phone: 216-937-0111

MILWAUKEE

2420 S. Lincoln Memorial Drive
Milwaukee, WI 53207-1997
Phone: 414-747-7155

TOLEDO

420 Summit St
Toledo, OH 43604-1590
Phone: 419-259-6372

CHICAGO

215 W. 83rd St., Suite D
Burr Ridge, IL 60521
Phone: 708-986-2155

FOR INFORMATION ON OBTAINING A COAST GUARD LICENSE CONTACT

Coast Guard Regional Examination Center, Suite 700, 420 Summit St., TOLEDO
Phone: (419) 259-6395/96/97; Fax: (419) 259-6374

Our phone hours are Monday-Friday 8:00 a.m. - 4:00 p.m.

Our hours of operation are Monday-Friday 7:30 a.m. - 4:30 p.m.

*Note: Original or renewal applications can be obtained via faxback, downloaded via our Website, or by regular mail.

You can also obtain information on how to obtain your Coast Guard license or Merchant Mariners Document on the Coast Guard's Web page at <http://www.uscg.mil/>. Select the "Services We Provide" block. Scroll down to "Licensing". Scroll down to "General Information on Licenses and Documents". Select the one, which talks about REC Toledo links, and select.

VESSEL DOCUMENTATION

DOCUMENTING A RECREATIONAL BOAT (Initial Fee \$133.00) - A boat may be documented for PLEASURE if the following conditions are met:

- The vessel measures five net tons or more. One ton for every 100 cubic feet of hull capacity. (This is a volume-based figure and not the weight or displacement of the boat).
- The owner is a U.S. citizen
- The applicant can establish that he/she is the owner of the vessel.

DOCUMENTING A COMMERCIAL VESSEL (Initial Fee \$133.00 plus any endorsements) - A boat may be documented for commercial use by meeting all of the above requirements and the additional requirements below:

- Establish the facts of construction through a "builder's certificate" showing when the vessel was built, who the boat was built for, and where in the United States the boat was built.
- Present a COMPLETE chain of title from all past owners of the vessel and present proof of their U.S. citizenship.

RESPONSIBILITIES NOT WAIVED BY DOCUMENTATION

- Documentation does not provide exemption from federal, state or local taxes.
- Documentation yachts must still conform to state registration regulations.
- Documentation does not exempt a vessel from being boarded by federal, state, or local law enforcement officials.

FOR MORE INFORMATION ON DOCUMENTING A VESSEL CONTACT

U.S. Coast Guard National Vessel Documentation Center, 2039 Stonewall Jackson Dr.,
Falling Waters, WV 25419-9502. Phone: (800) 799-8362.

PASSENGER VESSEL LICENSE

PASSENGER VESSEL OPERATORS LICENSE - Anyone operating a motorboat carrying passengers must carry a Coast Guard issued license. To receive information regarding passenger vessel operators licenses contact: **U.S. Coast Guard, Regional Exam Center, 420 Summit Street, Suite 700, Toledo, OH 43604-1590.** Phone: (419) 259-6394

REQUIREMENTS - To obtain a license to operate a vessel carrying 6 or fewer passengers, the applicant must:

- (a) Be at least 18 years old
- (b) Have one year's experience operating motorboats.
- (c) Be able to speak, read and understand English.
- (d) Complete a written professional examination. The written examination will consist of questions regarding; Navigation rules (rules of the road). Navigational questions dealing in wind, weather, buoys, and etc. General Seamanship, boat handling, and etc. Safety first aid, lifesaving, fire fighting. Rules and regulations regarding Small passenger vessels.
- (e) Pass a physical examination.
- (f) Pass a drug test.

U. S. COAST GUARD REGULATIONS FOR THE CONTROL OF NONINDIGENOUS SPECIES IN BALLAST WATER ON VESSELS ENTERING THE GREAT LAKES

United States regulations implementing mandatory compliance with the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 went into affect May 10, 1993. It is estimated that over one hundred nonindigenous species have been introduced to the region over the years, and during the 1980s scientists have identified six new nonindigenous species, which were brought into the Great Lakes via vessels conducting ballast water exchanges in the lakes. The zebra mussel and the European Ruffe have been the two most notorious and destructive nonindigenous creatures in recent years. The cost of remediating the problems the zebra mussel alone is measured in the billions of dollars. United States regulations at 33 CFR 151 Subpart C - "Ballast Water Management for Control of Nonindigenous Species" apply to all vessels that have operated outside the Exclusive Economic Zone (EEZ) of either the U.S. or Canada, carrying ballast and wishing to enter Snell Lock regardless of other ports of call in the U.S. or Canada. The regulations require that the level of salinity in the ballast water equal or exceed 30 parts per thousand (ppt). The salinity of normal seawater ranges from 34 to 36 ppt. Currently, a master of any vessel of which these regulations apply has three options to choose from in order to comply with the requirements. The first option is to conduct a thorough ballast water exchange at sea beyond the EEZ in a depth of at least 2000 meters. The second option is to retain the vessel's ballast water onboard during the entire voyage within the Great Lakes. If this option is chosen, the Coast Guard Captain of the Port may seal any tank or hold containing ballast water in order to prevent the release of the water. The third option, an alternative environmentally sound method of ballast water management, must first be approved by the Commandant of the Coast Guard.

All ships bound for the St. Lawrence River and the Great Lakes (U.S. and Canadian ports) are reminded that all ballast water originating outside of the Exclusive Economic Zone (EEZ) of the United States must be exchanged prior to entering the Great Lakes. This includes vessels that may enter the EEZ with only unpumpable quantities of ballast in their tanks and subsequently add ballast during/after cargo operations in a U.S. or Canadian Maritime port, or while transiting the EEZ.

Vessels must conduct a deep ocean exchange in waters 200 nautical miles from shore and in depths of 2000 meters or more for ballast not originating within the EEZ. The regulations for the ballast water exchange program are contained in Title 33 of the Code of Federal Regulations Part 151 Subpart C.

If, due to heavy weather or other concerns regarding vessel safety or stability, the master feels a deep ocean exchange cannot be completed safely, request, the master must fully describe the conditions which preclude a deep ocean exchange. In most cases, the vessel will be directed to conduct the exchange in the Laurentian Channel. The vessel will then be boarded either in Montreal or Massena to verify a satisfactory exchange was completed. Ballast water exchanges at alternate sites can only be completed with prior approval from the Coast Guard. Vessels conducting exchanges at alternate exchange sites without Coast Guard approval may be required to retain all ballast on board for their St. Lawrence Seaway/Great Lakes voyage.

Also, vessels taking on ballast in a U.S. or Canadian coastal port, or during a coastal transit may be authorized to exchange ballast closer to shore WITH PRIOR APPROVAL from Marine Safety Office Buffalo. At a minimum, this "transit exchange" must be conducted in waters at least 100 nautical miles from shore and in depths greater than 2000 meters.

Requests for deviations from the regulations will be reviewed by U.S. Coast Guard Marine Safety Office Buffalo and approved on a case-by-case basis. Further guidance on the ballast water regulations and use of alternate exchange sites may be obtained by contacting Marine Safety Detachment Massena at (315) 769-5483.

GREAT LAKES MARITIME INDUSTRY VOLUNTARY BALLAST WATER MANAGEMENT PLAN FOR THE CONTROL OF RUFFE IN LAKE SUPERIOR

For All Vessels Entering Western Lake Superior

Owners and operators of vessels in the domestic and international trade on the Great Lakes recognize their role in assisting the government of the United States and Canada in controlling the introduction and spread of non-indigenous fish species. We recognize that control must be on many fronts, including ballast water for safety management, chemical control, predatory fish control, and other mechanisms. Vessel must use ballast water for safety purposes to provide adequate stability, trim, propulsion, maneuverability, and hull stress control. Recognizing these constraints, the marine industry will do everything within its power, consistent with safety and stability, to decrease the spread of known unwanted non-indigenous species. The introduction of new species from outside the system is under the control of the U.S. and Canadian Coast Guards through ballast water exchange regulations prior to entry into the system. This plan deals with the control of the spread of the European Ruffe from Western Lake Superior ports, in particular, Duluth/Superior or other harbors where Ruffe colonies are documented.

For Vessels Departing Lake Superior Ports West Of Ballast Demarcation Line

Operators of vessels pumping ballast water onboard in the above harbors, with ballast line intakes equipped with screens fitted with holes larger than 1/2 inches in diameter, are restricted at all times of the year in their pumping out of ballast water from these harbors into the Great Lakes or their Connecting Channels or harbors. This ballast water should be pumped out west of a ballast demarcation line **one mile east of Ontonagon, Michigan** and Grand Portage, Minnesota. Ballast water from these harbors must not be pumped out within 5 miles of the south shore of Lake Superior while west of the ballast demarcation line. Ballast exchange should take place in water at least 20 fathoms (120 feet) deep.

Operators of vessels pumping ballast water onboard in the above harbors, with ballast line intakes equipped with screens fitted with holes 1/2 inch in diameter or less, are restricted only during the period between May 15 and September 15 in their pumping out of ballast water from these harbors into the Great Lakes or their Connecting Channels or harbors. During this 4-month period, these vessels should pump out the harbor ballast water west of a ballast demarcation line **one mile east of Ontonagon, Michigan** and Grand Portage, Minnesota. Harbor ballast water must not be pumped out within 5 miles of the south shore of Lake Superior while west of the ballast demarcation line. Ballast exchange should take place in water at least 20 fathoms (120 feet) deep.

If ballast exchange is not completed at the time the vessel reaches the demarcation line, exchange may continue in Lake Superior, but only in waters at least 40 fathoms (240 feet deep) and 15 miles from shore. In all cases, exchange must stop before proceeding east of 86 degrees west.

Help Stop Exotic Species From Spreading!

Boaters can inadvertently spread exotic species from the Great Lakes to inland waters.

Before leaving Great Lakes ramps boaters should always:

- Drain water from bilge, motor, live wells and bait wells
- Remove weeds from boat, motor and trailer
- Dispose of left over bait in the trash, not in the water
- Rinse the boat with hot water, a high-pressure sprayer or let it dry for 5 days before launching in another water body.

For Vessels Departing Lake Superior Ports East Of Ballast Demarcation Line

Vessels departing Thunder Bay should limit pumping ballast onboard as in paragraphs (1) and (2) above. These vessels may exchange ballast in Lake Superior, but only in waters at least 40 fathoms (240 feet deep) and 15 miles from shore. In all cases, exchange must stop before proceeding east of 86 degrees west.

For All Vessels Departing Lake Superior Ports

Operators of vessels pumping in ballast water from the above harbors and leaving the harbor with that water will maintain a record showing the amount of ballast water taken, the means of control, in any, and the location where the treated or untreated harbor ballast water was pumped out.

The ballast water records will be available for review by U.S. or Canadian Coast Guard personnel.

The above requirements will be waived for vessels, which attest by means of a log entry that the harbor ballast water from the above harbors will not be pumped out within the Great Lakes/St. Lawrence Seaway System (at least until reaching salt water). Masters of these vessels recognize that ballast water from the above harbors must not be pumped out in any other fresh or brackish water port and thus should exchange ballast with salt water.

2002 ENFORCEMENT POLICY FOR CARGO RESIDUES ON THE GREAT LAKES

This listing sets forth the current U.S. Coast Guard interim enforcement policy regarding the incidental discharge of cargo residues, what are commonly called "cargo sweepings," from commercial dry cargo carriers on the Great Lakes during 2003. The interim enforcement policy applies only to such cargo residues, and does not alter the strict prohibition of any discharge of oily waste, untreated sewage, plastics, dunnage, or other things commonly understood to be "garbage," from vessels on the Great Lakes. Also, it does not apply to residues of any substance known to be toxic or hazardous, such as nickel, copper, zinc, lead, or materials classified as "hazardous" in provisions of law or treaty, the discharge of which is strictly prohibited in all areas. This policy applies to United States vessels anywhere in the Great Lakes and vessels of any nation operating in the United States waters of the Great Lakes.

The enforcement areas within which discharge will be penalized under Marpol V and Coast Guard regulations at 33 CFR Part 151, are generally stated in terms of required distances from land in statute miles, sometimes combined with depths, and special protection areas, subject to special exceptions as stated. A number of miles, without further modification, indicate the miles from land within which discharge will be penalized. The mile limits apply to all islands as well as main shorelines. Within each lake, mariners should check (a) rules applicable to specific cargos, (b) rules applicable to "all cargos" and "all cargos except clean stone," and (c) "special protection areas."

All miles are statute miles. 1 nautical mile = 1.151 statute miles, 1 statute mile = .87 nautical miles. (12 statute miles = 10.4 nautical miles, 13.8 statute miles = 12 nautical miles.)

Tributaries, Connecting Rivers, and St. Lawrence River

Limestone and Other Clean Stone:

No distance limitations, as long as no apparent impact on wetlands, fish spawning areas, and potable water intakes.

All Other Cargos:

No discharge.

Lake Ontario

Limestone and Other Clean Stone:

No distance limitations, as long as no apparent impact on wetlands, fish spawning areas, and potable water intakes.

Iron Ore:

6 miles.

Other Nonhazardous Dry Bulk Cargo Residues:

13.8 miles.

Lake Erie

Limestone and Other Clean Stone:

No distance limitations, as long as no apparent impact on wetlands, fish spawning areas, and potable water intakes.

Iron Ore:

6 miles, generally, but no discharge in Western Basin (west of a line due south from Point Pelee), unless covered by the special rule on the Western Basin below.

Coal and Salt:

13.8 miles generally, but no discharge in Western Basin (west of a line due south from Point Pelee), unless covered by the special rule on the Western Basin below.

Iron Ore, Coal, and Salt in the Western Basin:

No discharge in the Western Basin (west of a line due south from Point Pelee) except for vessels needing to discharge iron ore, coal, or salt residue after unloading in Toledo or Detroit and immediately thereafter loading new cargo in Toledo, Detroit, or Windsor. These vessels may discharge the iron ore, coal, or salt residue over the dredged navigation channels running between Toledo Harbor Light and Detroit River Light.

Other Nonhazardous Dry Bulk Cargo Residues:

13.8 miles generally, but no discharge in Western Basin (west of a line due south from Point Pelee).

Lake St. Clair

Limestone and Other Clean Stone:

No distance limitations, as long as no apparent impact on wetlands, fish spawning areas, and potable water intakes.

All Other Cargos:

No discharge.

Lake Huron

Limestone and Other Clean Stone:

No distance limitations, as long as no apparent impact on wetlands, fish spawning areas, and potable water intakes.

Iron Ore:

6 miles, generally.

Special rules for vessels upbound along the Michigan thumb: (a) 3 miles from shore between 5.8 miles northeast of entrance buoys 11 and 12 to the track line turn abeam of Harbor Beach. (b) For vessels bound for Saginaw Bay only, 4 miles from shore and not less than 10 fathoms of depth between the track line turn abeam of Harbor Beach and 4 miles northeast of Pte. Aux Barques Light. (No discharge anywhere in Saginaw Bay.)

Coal and Salt:

13.8 miles generally. Special rules for vessels upbound along the Michigan thumb: (a) 3 miles from shore between 5.8 miles northeast of entrance buoys 11 and 12 to the track line turn abeam of Harbor Beach. (b) For vessels bound for Saginaw Bay only, 4 miles from shore and not less than 10 fathoms of depth between the track line turn abeam of Harbor Beach and 4 miles northeast of Pte. Aux Barques Light. (No discharge anywhere in Saginaw Bay.) See also coal below.

Coal:

Special rule for vessels upbound from Alpena into ports along the Michigan shore south of Forty Mile Point: 4 miles from shore and not less than 10 fathoms of depth.

Other Nonhazardous Dry Bulk Cargo Residues:

13.8 miles.

All Cargos Except Clean Stone:

No discharge anywhere in Saginaw Bay.

All Cargos:

No discharge in the following special protection area:

- Six Fathom Scarp Mid-Lake Special Protection Area: The area enclosed by rhumb lines connecting the following coordinates, beginning on the northernmost point and proceeding clockwise:

44°55'N	82°33'W
44°47'N	82°18'W
44°39'N	82°13'W

44°27'N	82°13'W
44°27'N	82°20'W
44°17'N	82°25'W

44°17'N	82°30'W
44°28'N	82°40'W*
44°51'N	82°44'W

44°53'N	82°44'W
44°54'N	82°40'W

(*Note: This point lies approximately 0.5 statute miles east of the 161° LCA Westerly Limit Downbound line, thus allowing discharge while passing the Scarp within 0.5 miles of the limit line.)

Lake Michigan

Limestone and Other Clean Stone:

No distance limitations, as long as no apparent impact on wetlands, fish spawning areas, and potable water intakes.

Iron Ore:

General rule: 12 miles from shore north of 45°N and 6 miles from shore south of 45°N.

Special rules: (a) Discharge allowed at 4.75 miles off Big Sable Point and Point Betsie, along established LCA track lines. (b) Discharge allowed along 056.25° LCA track line between points due east of Poverty Island to a point due south of Port Inland Light.

Coal and Salt:

General rule of 13.8 miles. See also coal below.

Coal:

Special rules for coal: (a) Discharge allowed along 013.5° LCA track line between 45°N and Boulder Reef, and along 022.5° LCA track running 23.25 miles between Boulder Reef and the charted position of Red Buoy #2. (b) Discharge allowed along 037° LCA track line between 45°20'N and 45°42'N. (c) Discharge allowed along 056.25° LCA track line between points due east of Poverty Island to a point due south of Port Inland Light. (d) Discharge allowed at 3 miles for coal carried between Manistee and Ludington along customary route.

Other Nonhazardous Dry Bulk Cargo Residues:

13.8 miles.

All Cargos Except Clean Stone:

No discharge anywhere in Green Bay.

All cargos:

No discharge in the following special protection areas:

- Milwaukee Mid-Lake Special Protection Area (not so labeled on charts): The area enclosed by rhumb lines connecting the following coordinates, beginning on the northernmost point and proceeding clockwise:

43°27.0'N	87°14.0'W
43°21.2'N	87°02.3'W
43°03.3'N	87°04.8'W
42°57.5'N	87°21.0'W
43°16.0'N	87°39.8'W

- Waukegan Special Protection Area (not so labeled on charts): The area enclosed by rhumb lines connecting the following coordinates, beginning on the northernmost point and proceeding clockwise:

42°24.3'N	87°29.3'W
42°13.0'N	87°25.1'W
42°12.2'N	87°29.1'W
42°18.1'N	87°33.1'W
42°24.1'N	87°32.0'W

Lake Superior

Limestone and Other Clean Stone:

No distance limitations, as long as no apparent impact on wetlands, fish spawning areas, and potable water intakes, but not in special protection areas listed below.

Iron Ore:

6 miles, generally. Special rule of 3 miles off northwestern shore between Duluth and Grand Marais.

Coal and Salt:

13.8 miles generally. Special rule of 3 miles off northwestern shore between Duluth and Grand Marais.

Cement:

13.8 miles generally. Special rule of 3 miles off shore of Lake Superior west of a line due north from Bark Point.

Other Nonhazardous Dry Bulk Cargo Residues:

13.8 miles.

All cargos:

No discharge in the following special protection areas:

- Caribou Island & Southwest Bank Protection Area: The area enclosed by rhumb lines connecting the following coordinates, beginning on the northernmost point and proceeding clockwise:

47°30.0'N	85°50.0'W
47°24.2'N	85°38.5'W
47°04.0'N	85°49.0'W
47°05.7'N	85°59.0'W
47°18.1'N	86°05.0'W
- Stannard Rock Protection Area: 6 miles radius from Stannard Rock Light.
- Superior Shoal Protection Area: 6 miles radius from the center of Superior Shoal, at 48°03.2'N 87°06.3'W.

For further information, contact **Cdr. Mike Gardiner, Chief, Marine Safety Analysis and Policy, Ninth U.S. Coast Guard District, 1240 E. Ninth Street, Cleveland, Ohio, 44199-2060, (216) 902-6049**, Fax (216) 902-6059.

POLLUTION REGULATIONS - OIL AND HAZARDOUS SUBSTANCES

DISCHARGES PROHIBITED: The Federal Water Pollution Control Act of 1972, as amended by the Clean Water Act of 1977, and the Oil Pollution Act of 1990, (33 USC 1321) states that the discharge of oil of any kind into or upon U.S. waters is prohibited. Any such discharge subjects the owner or operator of the violating vessel to a civil penalty of up to \$27,500. The accused shall be given notice and have an opportunity for a hearing before a penalty is assessed.

NOTIFICATION REQUIREMENTS: The person in charge of a vessel or facility from which a discharge is made must immediately notify the Coast Guard National Response Center at **1-800-424-8802**. If reporting to the National Response Center is not practicable, spill reports can be made to the cognizant Marine Safety Office in on page 35. Failure to make this immediate notification can subject the violator to criminal penalties of up to \$25,000 in fines, five years imprisonment, or both. Persons observing intentional and/or unreported discharges should make reports right away to aid Coast Guard investigations.

HAZARDOUS SUBSTANCES: Under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or "Superfund") and the Superfund Amendments & Reauthorization Act (SARA) of 1986, the USEPA published a list of designated hazardous substances in 40 CFR Part 302 and Part 117. These lists establish a reportable quantity for individual hazardous substances. Spills or release at or above the reportable quantity into the environment (air, land, surface water, ground water) must be reported to the National Response Center **1-800-424-8802**. If reporting to the National Response Center is not practicable, spill reports can be made to the cognizant Coast Guard Marine Safety Offices listed on page 35.

OIL AND HAZARDOUS SUBSTANCES CLEANUP: The law requires that the owner or operator of a vessel or facility from which a discharge of oil or a release of a hazardous substance occurs (often called the Responsible Party or "RP") take action to clean up the discharge or release. For hazardous substances, it does not matter if a reportable quantity has been exceeded or not, the RP is responsible for the cleanup. If the RP does not clean up the discharge or release properly or ensure that the contractor that the RP hires conducts a proper, the Federal Government will assume responsibility for the cleanup. If this occurs, the RP may be liable for up to three times the cost of the Federal Government cleanup and may lose their limits of liability. The use of **soaps** or other dispersing agents or chemicals to dissipate oil is more harmful to the marine environment than if the oil had been left alone. Per 33 CFR 153.305, use of these agents (even agents that claim to be "approved" by the EPA by virtue of being on the NCP Product Schedule) without the permission of the Captain of the Port is against the law. You may be penalized up to \$27,500 for each incident.

POLLUTION REGULATIONS - GARBAGE AND PLASTIC

The discharge of ship-generated garbage into U.S. waters is prohibited. Violators face a possible civil penalty of \$25,000. Willful violations are considered a Class "D" felony. A Class "D" felony can be punishable by imprisonment of not more than six years and a fine of \$250,000 for an individual, and \$500,000 for an organization. The regulations can be found in Title 33, Code of Federal Regulations, Part 151. 33 CFR may be accessed at www.access.gpo.gov/nara/cfr/cfr-table-search.html#page1

HAZARDOUS MATERIALS INCIDENT REPORT

Title 49 Code of Federal Regulations Parts 171.15 and 171.16 specifies notification requirements for incidents involving certain hazardous materials. These requirements apply to persons engaged in the transportation of hazardous materials by vessel. Specific information concerning the notification may be obtained from the Coast Guard Marine Safety Offices on page 35.

POLLUTION REGULATIONS – SEWAGE/GRAY WATER

The state of Michigan, along with some other Great Lakes states, has a No Discharge Zone in effect which prohibits any discharge of sewage into the water from any vessel, and also prohibits any discharge of gray water from commercial vessels. The Clean Water Act (CWA) was passed in 1972 to restore and maintain the chemical, physical, and biological integrity of our Nation's waters. Section 312 of the CWA, entitled "Marine Sanitation Devices" gives Environmental Protection Agency and States the authority to designate No Discharge Zones (NDZ's), areas of a waterbody or an entire waterbody into which the discharge of sewage (whether treated or untreated) from all vessels is completely prohibited. NDZ's are designed to give States an additional tool to address water quality issues associated with sewage contamination. The EPA and the state of Michigan have designated the coastal waters, estuaries, and the inter-connected waterways of the Great Lakes within Michigan as a NDZ.

Under Section 312 of the CWA, "**Gray water**" means galley, bath, and shower water; "**Sewage**" means human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes except that, with respect to commercial vessels on the Great Lakes, such term shall include graywater; "**Discharge**" includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying or dumping. "**Coastal waters**" means, in the Great Lakes area, the waters within the territorial jurisdiction of the United States consisting of the Great Lakes, their connecting waters, harbors, roadsteads, and estuary-type areas such as bays, shallows and marshes. USCG regulations at 33 CFR 159.7 prohibit the operation of vessels with toilet facilities unless it has a proper Marine Sanitation Device (MSD), and also prescribes certain steps that vessel operators must take to secure their MSD when operating in a NDZ. 33 CFR part 159 may be found at www.access.gpo.gov/nara/cfr/waisidx_99/33cfrv2_99.html. For EPA information on Marine Sanitation Devices, see www.epa.gov/owow/oceans/vessel_sewage/.

NOTICE OF MARINE CASUALTY

Title 46 Code of Federal Regulations Part 4.05-1 specifies notification of a marine casualty as follows: immediately after the addressing of resultant safety concerns, the owner, agent, master, operator, or person in charge, shall notify the nearest Marine Safety Office Marine inspection Office or Coast Guard Group Office whenever a vessel is involved in a marine casualty consisting in -

- (1) An unintended grounding, or an unintended strike of (allision with) a bridge;
- (2) An intended grounding, or an intended strike of a bridge, that creates a hazard to navigation, the environment, or the safety of a vessel, or that meets any criterion of the following:
 - (a) A loss of main propulsion, primary steering, or any associated component or control system that reduces the maneuverability of the vessel;
 - (b) An occurrence materially and adversely affecting the vessel's seaworthiness or fitness for service or route, including but not limited to fire, flooding, or failure of or damage to fixed fire-extinguishing system, life-saving equipment, auxiliary power-generating equipment, or bilge-pumping systems;
 - (c) A loss of life;
 - (d) An injury that requires professional medical treatment (treatment beyond first aid) and, if the person is engaged or employed on board a vessel in commercial service, that renders the individual unfit to perform his or her routine duties; or
 - (e) An occurrence causing property-damage in excess of \$25,000, the damage including the cost of labor and material to restore the property to its condition before the occurrence, but not including the cost of salvage, cleaning, gas-freeing, dry-docking, or demurrage.

Notice given as required by 33 CFR 160.215 satisfies the requirement of this section if the marine casualty involves a hazardous condition as defined by 33 CFR 160.203.

As per Title 46 Code of Federal Regulations Part 4.05-5 the substance of the marine casualty notification must include the following:

- Name and official number of the vessel involved
- Name of the vessel's owner or agent
- The nature and circumstances of the casualty
- The location in which the casualty occurred
- The nature and extent of injury to personnel
- The damage to property.

In addition to the immediate notification to the Coast Guard of a marine casualty, Title 46 Code of Federal Regulations Part 4.05-10 requires that the owner, agent, master, operator or person in charge also file a written report of the marine casualty, within five days. This written report must be delivered to a Coast Guard Marine Safety Office or Marine Inspection Office. It must be provided on Form CG-2692 (Report of Marine Accident, Injury or Death), supplemented as necessary by appended Forms CG-2692A (Barge Addendum).

GREAT LAKES PILOTAGE

All foreign vessels and U.S. vessels under register are required to have a U.S. or Canadian pilot aboard. Exceptions are provided under the Great Lakes Pilotage Act of 1960, whereby U.S. and Canadian vessels operating regularly upon the Great Lakes or between ports in the Great Lakes and the St. Lawrence River are not required to take United States or Canadian registered pilots. This exception is extended to Canadian vessels making an occasional voyage from the Great Lakes to the Canadian Maritime Provinces.

Canadian vessels making more than an occasional voyage to the Maritimes or trading to United States coastal ports or overseas are NOT exempt from Great Lakes Pilotage.

Canadian vessels that operate regularly on the Great Lakes during the Great Lakes navigation season but which operate outside of the Great lakes during the non-navigation season (closed period) are required to engage a United States or Canadian registered pilot in the designated waters of the Great Lakes on their first voyage into the Great Lakes until all foreign cargo on board is discharged, or if the vessel is without cargo, to the first port inside the system if the vessel is coming directly from a foreign port outside the system. In addition, these Canadian vessels are required to engage a United States or Canadian registered pilot in the designated waters of the Great Lakes on their exit voyage from the first port where foreign cargo is loaded or from the last port of call within the system if the vessel is proceeding without cargo directly to a foreign port outside the system. Except as indicated above, these Canadian vessels are not required to engage a United States or Canadian registered pilot provided they meet all other applicable United States and Canadian requirements. For purposes of interpretation, "Foreign Cargo" on the exit voyage means cargo destined for a port outside Canada and outside the Great Lakes, and on the entrance voyage means cargo loaded outside Canada and outside the Great Lakes. A foreign port means a port outside Canada and outside the Great Lakes. Generally, the designated waters are the St. Lawrence River from St. Regis to Lake Ontario, Lake Erie west of Southeast Shoal, Detroit River, Lake St. Clair, St. Clair River, and St. Mary's River.

Any owner, master, or person in charge of a vessel and who violates the provisions of the Act shall be liable for a civil penalty not exceeding \$500 for each violation. Each day the vessel shall be so operated shall constitute a separate violation.

For further information contact Director, Great Lakes Pilotage, DOT/NASSIF BLDG RM. 5424, 400 Seventh St. S.W., Washington, D.C. 20590; (202) 366-8981.

Pilotage Requirements On The Great Lakes

<u>Status of Vessel</u>	<u>Designated Waters</u>	<u>Undesignated Water</u>
United State or Canadian Laker*	Licensed or Certified Pilot in Control	Licensed or Certified Pilot in Control
United State or	Registered Pilot in	Registered or Licensed

Canadian Vessel in Foreign Trade*	Control	or Certified Pilot Aboard
Foreign Vessel**	Registered Pilot in Control	Registered Pilot Aboard

*Individual United States or Canadian vessels may change back and forth from "salty" to "laker" status. A United States vessel may automatically shift from the "registry" endorsement to the "coastline" endorsement on her document. A Canadian vessel must first purge herself of any foreign cargo or, if in ballast, make a first port stop, and "regularly operate" in the lakes for the season.

** For purposes of this table, "foreign" means "third country," not United States or Canadian.

USEFUL INTERNET SITES

CHARTS & PUBLICATIONS

Canadian Hydrographic Service (CHS)	http://www.chshq.dfo.ca
Geomatics Canada	http://www.geocan.nrcan.gc.ca
National Imagery & Mapping Agency (NIMA)	http://www.nima.mil
U.S. Geological Survey (USGS)	http://mapping.usgs.gov

COAST GUARD

Canadian Coast Guard	http://www.ccg-gcc.gc.ca
United States Coast Guard	http://www.uscg.mil
U.S. Coast Guard Marine Safety and Environmental Protection	http://www.uscg.mil/hq/g-m/
Ninth Coast Guard District (news, units, services)	http://www.uscg.mil/d9/uscgd9.html
U.S. Coast Guard Auxiliary	http://www.cgaux.org
U.S. Coast Guard Navigation Center	http://www.navcen.uscg.mil
U.S. Coast Guard Ninth District - Great Lakes	http://www.uscg.mil/d9

CUSTOMS & IMMIGRATION

Citizenship & Immigration Canada	http://cicnet.ci.gc.ca
Revenue Canada - Customs	http://www.ccra-adrc.gc.ca/customs
U.S. Customs Service	http://www.customs.gov
U.S. Immigration & Naturalization (INS)	http://www.ins.usdoj.gov

ENVIRONMENT

Department of Natural Resources -	
Illinois	http://dnr.state.il.us
Indiana	http://www.state.in.us/dnr/boating
Michigan DNR (mostly fish & game issues)	http://www.dnr.state.mi.us
Michigan DEQ (environmental issues)	http://www.deq.state.mi.us
Michigan	http://www.dnr.state.mi.us
Minnesota	http://www.dnr.state.mn.us
New York State	http://unix2.nysed.gov
Ohio	http://www.dnr.state.oh.us
Ontario Ministry of Natural Resources	http://www.mnr.gov.on.ca/MNR
Pennsylvania	http://www.dcnr.state.pa.us
Wisconsin	http://www.dnr.state.wi.us
Great Lakes - St. Lawrence Water Levels	http://www.great-lakes.net/envt/water
National Data Buoy Center	http://www.ndbc.noaa.gov
National Park Service (NPS)	http://www.nps.gov
National Weather Service - Cleveland, OH	http://www.csuohio.edu/nws
Parks Canada	http://parkscanada.pch.gc.ca
U.S. Fish & Wildlife Service	http://www.fws.gov
U.S. National Ocean Service (NOAA)	http://www.nos.noaa.gov

ST. LAWRENCE SEAWAY

St. Lawrence Seaway Development Corporation	http://www.seaway.dot.gov
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St. Lawrence Seaway Management Corporation

<http://www.seaway.ca>

U.S. ARMY CORPS OF ENGINEERS

Great Lakes & Ohio River Division
Mississippi Valley Division

<http://www.lrd.usace.army.mil>

<http://www.mvd.usace.army.mil>

OTHER

Federal Blue Pages Online
Federal Communications Commission
Federal Information Exchange
U.S. Code of Federal Regulations (CFR)

<http://www.bp.fed.gov>

<http://www.fcc.gov>

<http://www.info.gov>

<http://www.nara.gov/fedreg>

<http://www.access.gpo.gov/nara/cfr>

U.S. Power Squadron

<http://www.usps.org>

DISTRESS COMMUNICATIONS FORM

EMERGENCY TEAR-OUT SHEET

INSTRUCTIONS: Complete this form now (except for items 6 through 9) and post near your radiotelephone.

Speak **SLOWLY - CLEARLY - CALMLY**

1. Make sure your radiotelephone is on.
2. Select either VHF Channel 16 (156.8 MHz) or 2182 kHz.
3. Press microphone button and say: "**MAYDAY - MAYDAY - MAYDAY**"

4. THIS IS _____
your boat name your boat name your boat name your call letters

5. Say: "**MAYDAY**: _____"
your boat name

6. **TELL WHERE YOU ARE** (What navigational aids or landmarks are near?)

7. STATE THE NATURE OR YOUR DISTRESS.

8. GIVE NUMBER OF ADULTS AND CHILDREN ABOARD, AND CONDITIONS OF ANY INJURED.

9. ESTIMATE PRESENT SEAWORTHINESS OF YOUR BOAT.

10. BRIEFLY DISCRIBE YOUR BOAT:

_____ ; _____ FEET;
State Registration No. Length

_____ FEET; ; HULL; TRIM;
Draft Type Color Color

_____ MASTS; POWER; _____
Number Type/Horsepower Construction Material

Anything else you think will help the rescuers to find you

11. Say: "**I WILL BE LISTENING ON CHANNEL 16 / 2182.**"
(Cross out channel no. or frequency that does not apply)

12. End Message by saying: "**THIS IS _____ OVER,**"
(your boat name and call sign)

13. Release microphone button and listen: Someone should answer.
IF THEY DO NOT, REPEAT CALL, BEGINNING AT ITEM 3.
If there is still no answer, switch to another channel and begin again.

VESSEL INFORMATION DATA SHEET

When requesting assistance from the Coast Guard, you may be asked to furnish the following details. This list should therefore, be filed out as completely as possible and posted alongside your transmitter with the Distress Communications form.

1. DESCRIPTION OF VESSEL REQUIRING ASSISTANCE.

Boat Name: _____, Numbers: _____

Sail: _____, Power: Inboard _____, Outboard _____, I/O _____

Type of vessel: (Ketch, sloop, sedan or express cruiser, row boat, etc.) _____.

Manufacturer or class _____.

Boat Length _____. Draft _____. Home Port _____.

Hull Markings (color trim etc.) _____.

2. SURVIVAL GEAR ABOARD

Personnel Flotation Devices _____

Flares _____

Flashlight _____

Raft _____

Dinghy or Tender _____

Anchor _____

Spotlight _____

Auxiliary power _____

Horn _____

3. ELECTRONIC EQUIPMENT

Radiotelephone(s) VHF MF HF
Channels/Frequencies available

VHF Channel 22A _____

MF--2670 kHz _____

Radar _____

Depth Finder _____

Loran _____

Direction Finder _____

EPIRB _____

Cellular Telephone _____

DGPS/GPS _____

4. VESSEL OWNER/ OPERATOR

Name _____

Telephone Number _____

Address _____

Is Owner/Operator an experienced sailor? Yes No

5. MISCELLANEOUS

Be prepared to describe the local weather conditions, depth of water etc.

MEDICAL EVACUATION CHECKLIST

1. PATIENT INFORMATION

A. NAME & NATIONALITY: _____

B. SEX: _____ AGE: _____ HEIGHT: _____ WEIGHT: _____

2. VITAL SIGNS

A. PULSE: _____ AND _____ TEMP: _____
(no./min.) (weak/normal/pounding)

B. RESP: _____ AND _____ BLOOD PRESSURE: _____
(no./min.) (shallow/normal/deep) (if known)

3. GENERAL SYMPTOMS

A. DESCRIPTION OF THE INJURY OR ILLNESS: _____

B. KNOWN MEDICAL PROBLEMS: _____

C. TIME OF INJURY/ONSET OF ILLNESS: _____

D. LOCATION OF INJURY/PAIN: _____

E. TYPE OF PAIN: _____

F. PATIENT CONSCIOUS? YES/NO AMBULATORY? YES/NO

G. PUPILS DILATED? YES/NO REACTIVE? YES/NO EQUAL? YES/NO

H. CONVULSIONS? YES/NO SIGNS OF SHOCK? YES/NO

I. SKIN CONDITION: _____
(DRY / SWEATY) (BLANCHED / YELLOW / RED / NORMAL)

4. SHIP INFORMATION

A. NAME: _____ CALL SIGN: _____

NATIONALITY: _____

B. POSITION: _____ N, _____ W, TIME _____

C. COURSE/SPEED: _____ T/ _____ KTS

D. WX: WIND _____ SEA _____ VIS _____ CLOUD COVER _____

E. TYPE OF VESSEL: _____

F. CONFIGURATION: _____
(LOCATION OF BRIDGE, BOOMS, MASTS, BEST HOISTING AREA)

G. LAST PORT OF CALL: _____ DATE DEPARTED: _____

H. NEXT PORT OF CALL: _____ ETA: _____

I. CONTRACT MEDICAL FACILITY? _____

J. AGENT/OWNER: _____ NOTIFIED? _____
(YES/NO)

K. PHONE NUMBER: () _____

L. COMMS SCHEDULE: EVERY _____ MINUTES ON CH _____, COMMENCING
AT _____ HOURS.

5. MEDEVAC RENDEZVOUS:

A. AT POSITION: _____ N, _____ W,

B. TIME _____

C. RESPONDING UNITS CALL SIGN: "COAST GUARD _____"

6. DOCTOR'S RECOMMENDED TREATMENT: _____

DRAWBRIDGE SIGNALS / OPERATION DELAYS

TO: U.S. COAST GUARD
MARINE SAFETY OFFICE
(select address below)

DATE: _____

NOTE: Reports of Delay will be processed
only when all items are fully addressed
and reports submitted within 15 days of
reported delay / difficulty.

1. NAME OF VESSEL: _____

2. PORT: _____

3. DATE OF DELAY: _____ // INBOUND // OUTBOUND

4. BRIDGE NAME: _____ WATERWAY: _____ MILE: _____
(Bridge name, waterway, and mile to be from Coast Pilot #6)

NOTE: IF DELAY IS AT RAILROAD BRIDGE, AND TRAINS ARE "CONTINUOUSLY" BEING RUN ACROSS,
PLEASE INDICATE ON REVERSE SIDE OF FORM THE STARTING AND ENDING TIMES FOR EACH TRAIN.

5. IF ADVANCE NOTICE REQUIRED FOR OPENING, NOTICE GIVEN:
DATE: _____ TIME: _____ TO WHOM: _____

6. TIME FIRST SIGNAL GIVEN FOR BRIDGE: _____

7. TIME FIRST SIGNAL RECEIVED FROM BRIDGE: _____
(Did response indicate immediate opening could be expected,
or that there would be a delay?) _____

8. TIME BRIDGE OPENED: _____ TIME LOST: _____
TOTAL TIME LOST: _____ (including time required for
checking, stopping, anchoring)

9. WHAT WAS REASON FOR DELAY? _____

10. WHAT NAVIGATIONAL OR MANEUVERING DIFFICULTIES WERE CAUSED BY
DELAY? _____

PRINTED OR TYPED NAME AND ADDRESS OF COMPLAINANT:

(SIGNATURE) _____

Commanding Officer
Marine Safety Office Buffalo
1 Fuhrman Blvd.
Buffalo, NY 14203-3189
TEL: 716-843-9570
FAX: 716-843-9571

Commanding Officer
Marine Safety Office Duluth
600 S. Lake St. Canal Pk.
Duluth, MN 55802
TEL: 218-720-5286
FAX: 218-720-5258

Commanding Officer
Marine Safety Office Milwaukee
2420 S. Lincoln Mem. Hwy
Milwaukee, WI 53207-1997
TEL: 414-747-7155
FAX: 414-747-7890

Commanding Officer
Marine Safety Office Cleveland
1055 E. Ninth Street
Cleveland, Ohio 44114-1092
TEL: 216-937-0111
FAX: 216-522-3290

Commanding Officer
Marine Safety Office Detroit
110 Mt. Elliot Ave.
Detroit, MI 48207-4380
TEL: 313-568-9580
FAX: 313-568-9581

Commanding Officer
Marine Safety Office Chicago
215 W. 83rd. St. Suite D
Burr Ridge, IL 60521-7059
TEL: 630-986-2155
FAX: 630-986-2120

Commanding Officer
Marine Safety Office Toledo
Federal Building, Room 501
234 Summit Street
Toledo, Ohio 43604-1590
TEL: 419-418-6000/01
FAX: 419-259-6374